DOCUMENT RESUME

ED 228 183 SP 021 999

AUTHOR	Hastad, Douglas N.; And Others
TITLE	Evaluation of the Health Related Physical Fitness Status of Youth in the State of Illinois.
INSTITUTION	Northern Illinois Univ., DeKalb. Dept. of Physical Education.
SPONS AGENCY	Illinois Association for Health, Physical Education, and Recreation.
PUB DATE	Feb 83
NOTE	42p.; May be marginally legible because of small print.
PUB TYPE	Reports - Descriptive (141) -- Statistical Data (110) -- Tests/Evaluation Instruments (160)
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Curriculum Development; Databases; Elementary Secondary Education; *Evaluation Methods; Inservice Teacher Education; *Physical Education; *Physical Fitness; *State Norms; *Teacher Workshops; *Testing
IDENTIFIERS	*Illinois

ABSTRACT

This four-part booklet is the result of a project with four goals: (1) familiarize physical educators in Illinois with the four items of the American Alliance for Health, Physical Education, Recreation and Dance (AAHPERD) Health Related Physical Fitness Test; (2) design materials regarding implementation strategies for health related fitness that could be readily delivered to practitioners via inservice workshops; (3) devise a computer record keeping service that could be made available to all physical educators in Illinois; and (4) provide a normative health related physical fitness database for kindergarten through twelfth grade students in Illinois. Part I of this booklet presents descriptions of the four items of the AAHPERD Health Related Physical Fitness test: distance runs, sum of skinfolds, modified sit-ups, and sit and reach. In part II, implementation strategies for health related fitness are described. Included in this section are outlines of discussion items for two AAHPERD workshops. The names and addresses of contact persons for delivery of the workshops in eight Illinois districts are listed. A description is given in part III of the development of a computerized report system which has been devised for consolidating data on fitness test results in the state. Part IV presents tables which delineate the health related physical fitness percentile norms for youth in the state of Illinois which were compiled during the years 1980-82. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Northern Illinois University

Department of Physical Education

ED228183

Evaluation of the Health Related Physical Fitness Status of Youth in the State of Illinois

Douglas N. Hastad
James R. Marett
Sharon A. Plowman

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Douglas N. Hastad

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

- ✓ This document has been reproduced as received from the person or organization originating it.
- ☐ Minor changes have been made to improve reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

SP 021 999

NIU Human Performance Laboratory

Funding for this project was obtained through the Illinois Association for Health, Physical Education, and Recreation and the Department of Physical Education at Northern Illinois University in DeKalb. The authors wish to express thanks to these agencies for their support.

The authors teach in the Department of Physical Education at Northern Illinois University, DeKalb, Illinois 60115. 815-753-1425.

Copyright pending, February, 1983

Introduction

Improvement of physical fitness has long been considered one of the principal goals of physical education programs for children and adolescents. However, over the past thirty years the emphasis in physical education programs for children and youth has focused more on individualized skill instruction and sport performance than physical fitness. Recently, however, physical educators and medical personnel have been restudying the concept of physical fitness in light of the rapid increase of degenerative diseases which have afflicted our society.

The prevalance of degenerative maladies among adults is both well documented and disquieting. Unfortunately, recent studies have demonstrated that the occurrence of certain degenerative diseases is not limited exclusively to adults. That is, the risk factor patterns associated with the onset of degenerative diseases are becoming apparent in adolescents and children.[1] For example, a study by Gilliam et al.[2] in which 47 active boys and girls ages 7 to 12 were tested, found that 62% of the children had at least one coronary heart disease risk factor; 11% were obese; 18% and 11% had elevated triglycerides and cholesterol, respectively; and another 11% had low physical work capacity as measured by maximal oxygen uptake. Conservative estimates suggest that between 30% - 60% of the school age children in America are overfat. Of these obese children, it is predicted that four out of five will grow into obese adults. Likewise, 28 of 29 teenagers who are obese will become obese adults.[3] While young children display increased flexibility with growth, by early adolescence this trend begins to reverse and by the time adulthood is reached 80% will suffer some form of low back pain.[4] Over 85% of this low back pain is the result of lack of strength, muscular endurance, and flexibility in the abdominal, low back, and hamstring region.[5] Information such as this has prompted leaders in physical education to contend that as we move into the 1980's there is a definite need to make health-related fitness a primary focus of the physical education curriculum.[6]

---

[1]Lauer, R. M. and others. Coronary heart disease risk factors in school children: the Muscatine study. *Journal of Pediatrics*. 1975, *86*, 697-706.

[2]Gilliam, T. B. and others. Prevalence of coronary heart disease risk factors in active children, 7 to 12 years of age. *Medicine and Science in Sports*. 1977, *9*, 21-25.

[3]Johnson, M. L. The prevalence and incidence of obesity in a cross section of elementary and secondary school children. *American Journal of Clinical Nutrition*. 1956, *4*, 37.

[4]President's Council on Physical Fitness and Sports. *Physical Fitness Research Digest*. B. Harrison Clarke (Ed.). October 1975, *4*, Series 5.

[5]Cundiff, D. and Brynteson, P. *Health fitness guide to a lifestyle*. Dubuque: Kendall-Hunt, 1979.

[6]Pate, R. and Corbin, C. Implications for the physical education curriculum. *Journal of Physical Education and Recreation*. 1981, *52*, 36-38.

Providing impetus to this health fitness thrust is the 1980 Surgeon General's Report: "Promoting Health/Preventing Disease: Objectives for the Nation" which states that by 1990:

1. The proportion of children and adolescents participating regularly in appropriate physical activities, particularly cardiorespiratory fitness programs which can be carried into adulthood, should be greater than 90%.
2. The proportion of children and adolescents participating in a daily school physical education program should be greater than 60%.
3. A methodology for systematically assessing the physical fitness of children should be established, with at least 70% participation in such an assessment.[7]

These are especially lofty goals for a society where:

- the average child spends more time watching television than he/she does in the classroom over 12 years of schooling.
- only an estimated one-third of our children and youth participate in daily school physical education.
- approximately 10 million school-age children are overweight.
- youngsters' heart rates rarely elevate to a training level during periods of recess, recreation, and most youth sports.

While the adult population has displayed considerable change in their reported attitude toward, and involvement in physical activity over the past few years,[8] this reorientation has obviously not yet filtered down to the youth of this country. What we are thus confronted with is a challenge to provide youth with increased levels of purposeful physical activity which are enjoyable and conducive to positive health.

To create a public awareness regarding the value of fitness, a national task force (appointed by AAHPERD) recently focused attention on a viable and meaningful way to assess the health-related functional capacity of youth. A significant product of the task force's endeavors was the developement of a four item field test to assess those aspects of functional capacity that have been identified as vital to a healthy and productive lifestyle.[9] This assessment tool, which became available in the Fall of 1980, gives physical educators in the field an opportunity to evaluate the health related physical fitness of their students. Further, this instrument will assist in the ongoing evaluation to determine the overall effectiveness that physical education programs have in meeting the important needs of the students with respect to their health related functional capacity. This approach is considered by the task force to be the first step in reversing the early onset of the degenerative diseases among the nation's youth.

---

[7]Wilmore, J. H. Objectives for the nation-physical fitness and exercise. *Journal of Physical Education, Recreation and Dance*. 1981, *53*, 41-43.

[8]*Ibid*

[9]Specific components of health related physical fitness were identified as cardiorespiratory fitness, body composition (leanness/fatness), and strength and endurance of the abdominal muscles coupled with flexibility of the lower back and posterior thigh.

Purpose

This project represents an attempt to develop and disseminate meaningful health related physical fitness information that will assist the physical educator in curriculum development and programming for the 1980's. Specifically, the purposes were to:

1. Familiarize physical educators in the state of Illinois with the four items of the AAHPERD Health Related Physical Fitness Test.
2. Design materials regarding implementation strategies for health related fitness that could be readily delivered to the practitioner via the inservice workshop.
3. Devise a computerized record keeping service that could be made available to all physical educators in Illinois.
4. Provide a normative health related physical fitness data base for youth (K–12) in the state of Illinois.

Photo by Gordon Means, Art/Photo Department, Northern Illinois University

I. AAHPERD Health Related Physical Fitness Test

Description of Test Items—Condensed from the 1980 *Health Related Physical Fitness Test Manual*[10]

1. Distance Runs

The purpose of the distance runs is to measure maximal function and endurance of the cardiovascular-respiratory systems.

For students ages 5–17+ years a one mile run for time (to the nearest second) or 9-minute run for distance (to the nearest 10 yards) have been selected. For students 13 years of age or older the 1.5 mile run for time or the 12-minute run for distance may be substituted. The decision as to which test to use should be based on facilities, equipment, time limitations, administrative considerations, and personal preference of the test administrator.

Any smooth flat area safe for running where distance can be accurately measured may be used for testing.

Before testing is done students should be screened so that no children with known medical problems which would contraindicate vigorous exercise are allowed to take the test. Students should practice distance running, with particular emphasis being placed on the concept of pace, before being tested. The purpose of the test should be explained to the students and steps taken to ensure a high level of motivation to ensure meaningful results.

[10]Reprinted by permission of the American Alliance for Health, Physical Education, Recreation and Dance, 1900 Association Drive, Reston, VA. 22091.

2. Sum of Skinfolds

The purpose of the skinfold test is to evaluate the level of body fatness.

A skinfold consists of a double layer of skin and subcutaneous fat. Two sites, the triceps and subscapular, have been chosen because they are easily measured and highly correlated with total body fat. The triceps skinfold is measured over the triceps muscle of the right arm midway between the olecranon process of the elbow and the acromial process of the scapula (tip of shoulder) and parallel to the longitudinal axis of the upper arm. The subscapular site is also measured on the right side of the body ½ inch below the inferior angle of the scapula following the natural lines of the fold.

A skinfold caliper (Lange, Harpenden, Slim Guide, Fat-O-Meter, Ross Laboratories, etc.) is necessary for taking these measurements. The calipers should provide an accurate calibration capability and exert a constant pressure of 10 gm/ sq mm throughout the measurement range.

Skinfolds are measured in millimeters (mm) (to the nearest 0.5 mm) with the middle score of the three trials being recorded. The teacher needs to practice taking skinfolds to ensure that the measurements will be accurate and reliable. Proper technique includes firmly grasping the skinfold between thumb and forefinger and lifting it away, placing the caliper ½ inch above or below the skinfold, slowly releasing the pressure on the caliper trigger so they can exert full tension on the skinfold and then reading the scale.

Student preparation for the skinfold is minimal including only proper dress—short sleeved loose fitting shirt or a halter type top.

3. Modified Sit-ups

The purpose of the sit-up is to evaluate abdominal muscular strength and endurance.

To begin the test the student is positioned on his or her back with the legs flexed at the knees, feet flat on the floor, and the heels between 12 and 18 inches from the buttocks. The arms should be crossed and in contact with the chest with the hands on the opposite shoulders. The forearms must remain in contact with the chest and the hand must remain in contact with the shoulders during the complete curl. The head is tucked (curled) with the chin to chest. A partner holds the feet on the floor and counts the number of correctly executed sit-ups. The student curls to a sitting position until the forearms touch the thigh. One sit-up is complete when the midback makes contact with the testing surface on the down portion.

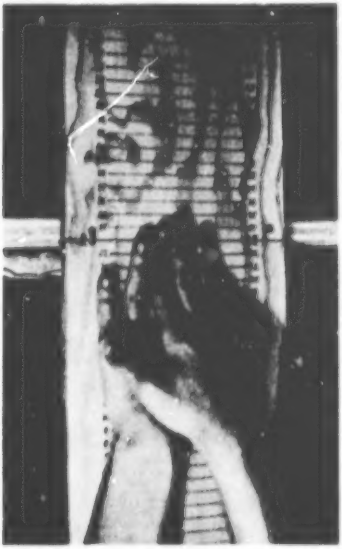
Mats are recommended for comfort. The number of correctly executed sit-ups in 60 seconds is the score. Students should practice the correct technique prior to testing.

4. Sit and Reach

The purpose of the sit and reach is to evaluate the flexibility of the low back and posterior thigh.

A special apparatus consisting of a box with a measuring scale where 23 centimeters is at the level of the feet is required for this test. The student assumes a sitting position with legs extended, feet shoulder width apart, and shoes off. The arms are extended forward with the hands one on top of the other. The student reaches directly forward, palms down, along the measuring scale four times, holding the position of maximum reach the last time for one full second. The score is the most distant point reached measured to the nearest centimeter. The legs must remain straight. Only one trial is given.

Students should warm up and stretch adequately before taking the test.



II. Implementation Strategies for Health Related Fitness

The shift in philosophy and direction of the fitness movement has necessited retraining opportunities for the practitioner. In particular, physical educators in the schools need to become knowledgeable in health fitness and develop a special awareness with regard to evaluative and curricular implications. While the availability of printed matter detailing aspects of the test and discussing procedures to incorporate health related fitness into the curriculum[1] is abundant and attendance at local, state, or national conferences is informative, it is helpful to become familiar with the specifics of the test and/or appropriate fitness activities in a personal setting where each individual may:

1. Develop a philosophy of health related physical fitness.
2. Practice administration of each test item under the supervision of a trained individual.
3. Develop correct competencies in health related physical fitness testing and fitness programming.
4. Consult with a trained individual on evaluative/curricular matters.
5. Share ideas and concerns with colleagues.

To provide the much needed "hands-on" experience, the authors have designed two workshop formats that provide an indepth analysis of health related physical fitness implementation strategies (see Figures 1 & 2).

Figure 1

Workshop 1*: AAHPERD Health Related Physical Fitness Test

- Background of AAHPERD Health Related Fitness Test
- What is Health Related Fitness?
- Visual Presentation of Test Items
- Protocol, Problems and "Hands-on" Experience
- Curricular Implications
- Statewide Fitness Evaluation Project
- Collection and Analysis of Data Via Optical Scan Form

*In conjunction with statewide fitness evaluation project endorsed by IAHPER.

Figure 2

Workshop 2: The Fitness Component in the Curriculum

- Value of Health Related Fitness
- Fitness Opportunities for Children: Where & When?
- Principles of Exercise
- Format of Fitness Routines
- Activity (Circuit, Aerobic Dance, Rope Jumping, etc.)
- Blending Fitness into the Daily Lesson
- Supplemental Fitness Activities
- Overview of AAHPERD Fitness Test

[1]See Reference List for Pertinent Texts and Articles

These workshops are an excellent setting to discuss health fitness the AAHPERD Health Related Physical Fitness Test and feasible implementation tactics thereof. These workshops can be offered as a function of the University/College Department of Continuing Education or, in their most popular form, the school inservice workshop.

To facilitate the delivery of workshops to as many people as possible an *Implementation Network* has been established for the state of Illinois. Utilizing the existing IAHPER districts coordinators have been identified (see Figure 3) for each district. In each case the individual(s) so identified are both ready and willing to deliver workshops which may follow the suggested formats (see Figures 1 & 2) or can be tailored specifically to the needs of a particular situation.

Figure 3

IAHPER District Coordinators for the AAHPERD Health Related Physical Fitness Test Implementation

District 1—Chicago
Sharon Ann Plowman, Doug Hastad, Jim Marett, Dept. of Physical Education, Anderson Hall, Northern Illinois University, DeKalb, Illinois 60115.

District 2—Eastern
(Counties of Kankakee, Iroquois, Livingston, McLean, Ford, Vermilion, Champaign, DeWitt, Piatt, Macon, Moultrie, Douglas Edgar)
Geraldine Greenlee, Horton Complex, Dept. of Physical Education, Illinois State University, Normal, IL 61761.
Tim Lohman, Physical Fitness Lab, Freer Gymnasium, University of Illinois, Urbana, IL 61801.

District 3—Northeastern
(Counties of Lake, Cook, DuPage, Will)
Joyce Ballard, Dept. of Physical Education, 555 31st Street, George Williams College, Downers Grove, IL 60515.

District 4—Northern
(Counties of Jo Daviess, Stephenson, Winnebago, Boone, McHenry, Carroll, Ogle, DeKalb, Kane, Whiteside, Lee, Rock Island, Henry, Bureau, La Salle, Kendall, Grundy, Putnam)
See District 1

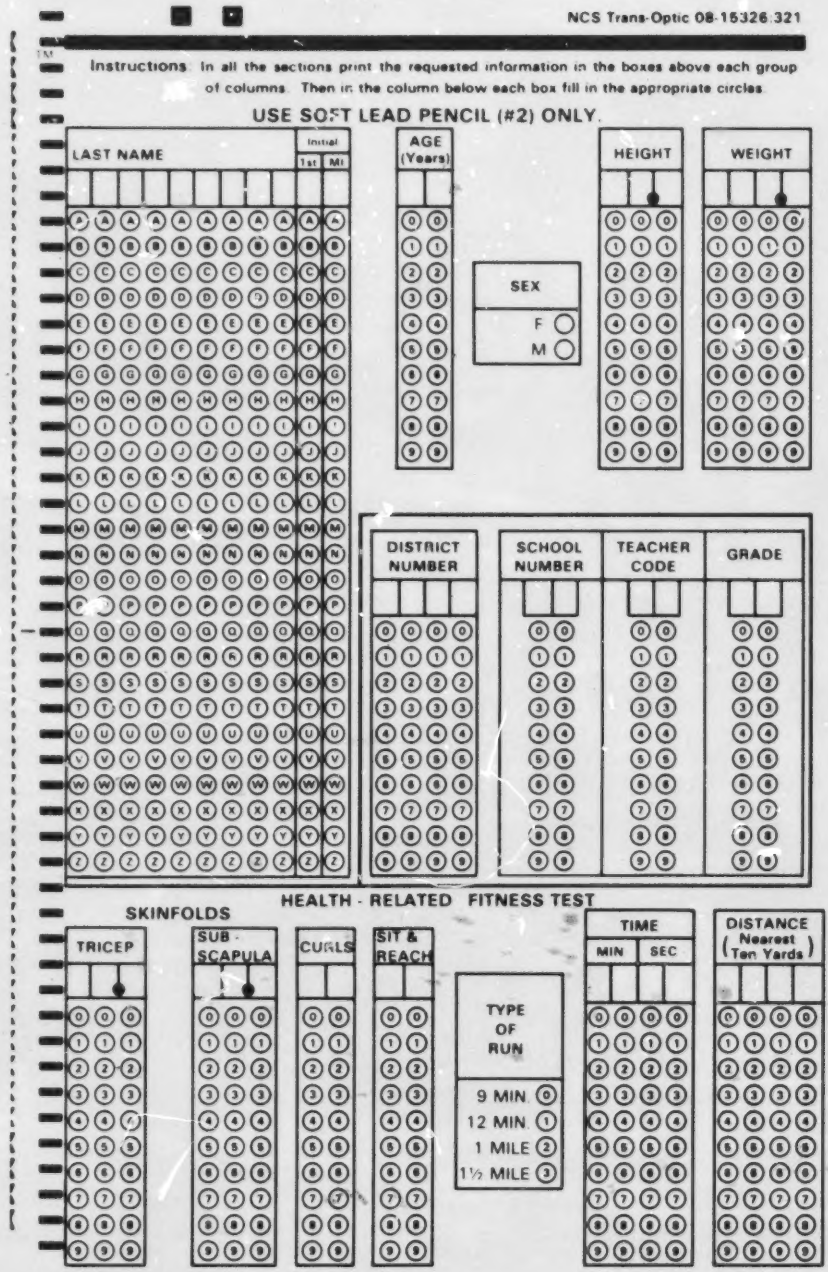
District 5—Southeastern
(Counties of Shelby, Coles, Cumberland, Clark, Fayette, Effingham, Jasper, Crawford, Marion, Clay, Richland, Lawrence, Wayne, Edwards, Wabash)
J. W. Sanders, Russ Fischer, Larry J. Ankenbrand, Dept. of Physical Education, Eastern Illinois University, Charleston, IL 61920.

District 6—Southern
(Counties of Jefferson, Randolph, Perry, Franklin, Hamilton, White, Jackson, Williamson, Saline, Gallatin, Union, Johnson, Pope, Hardin, Alexander, Pulaski, Massac)
Sara Rennie, 615 Harrison, Mt. Vernon, IL 62864.

District 7—Southwestern
(Counties of Calhoun, Greene, Macoupin, Montgomery, Christian, Jersey, Madison, Bond, St. Clair, Clinton, Monroe, Washington)
Volunteer needed. Contact closest neighboring district representative.

District 8—Western
(Counties of Mercer, Henderson, Warren, Knox, Stark, Marshall, Peoria, Woodford, Hancock, McDonough, Fulton, Tazewell, Mason, Adams, Schuyler, Brown, Cass, Menard, Logan, Pike, Morgan, Sangamon, Scott)
Cheryl Cohen, Dept. of Physical Education for Women, Western Illinois University, Macomb, IL 61455.

Figure 4


NCS Trans-Optic 08-15326-321
Instructions: In all the sections print the requested information in the boxes above each group of columns. Then in the column below each box fill in the appropriate circles.
USE SOFT LEAD PENCIL (#2) ONLY.
LAST NAME
Initial
1st
MI
AGE (Years)
SEX
F
M
HEIGHT
WEIGHT
DISTRICT NUMBER
SCHOOL NUMBER
TEACHER CODE
GRADE
HEALTH - RELATED FITNESS TEST
SKINFOLDS
TRICEP
SUB - SCAPULA
CURLS
SIT & REACH
TYPE OF RUN
9 MIN. 0
12 MIN. 1
1 MILE 2
1½ MILE 3
TIME
MIN
SEC
DISTANCE (Nearest Ten Yards)

13

III. Computerized Report of Fitness Scores

Inclusion of formal fitness evaluation into the yearly curriculum is often viewed by the physical educator as a burdensome experience which requires extra organization, additional paperwork, and consumes important class time. When fitness assessment does occur, many times the performance scores get filed without any attempt to interpret the results for the students. With the current emphasis on being accountable it behooves physical education teachers to implement evaluation procedures that will reflect curricular emphasis.

In an effort to offset the negative concerns associated with testing and in a oid to provide additional incentive for school districts to embark on health related fitness testing the authors have developed a computerized record keeping service available, upon request, to any school in the state.

The first step in this effort to streamline health related physical fitness testing was to devise an optical scan form on which personal data and raw scores are recorded (see Figure 4). To further expedite the record keeping process several specially designed computer programs were developed.[12] The output derived from this procedure provides participating school districts with meaningful data for students, parents, physical educators, and administrators. The initial analytical procedures organize raw scores by grade, gender, and in alphabetical order. Raw scores with accompanying national percentile rankings for each test are reported for each child tested. The standard output resulting from the first phase of data analysis is detailed in Figure 5.

The second phase of data analysis results in the compilation of local norms. Resulting tables display the percentile equivalents for the range of fitness scores achieved by students from the respective school district. In other words, the local norm chart allows a student to determine their fitness status relative to other students of the same age and gender in their district.

The third piece of computer output is a copy of current state of Illinois health related fitness norms. These state norms can serve as a legitimate data base for those individuals and/or schools desiring to make comparative measures between their students fitness level and that exhibited by a representative sample of youth in other parts of the state. As with the local norms, the state norms are organized and reported by age and gender for each one of the health fitness tests.

The outcome of this statewide collection of health related physical fitness scores already has been of benefit to school districts throughout the state. Information derived from the computerized reporting has helped to facilitate, strengthen, and provide direction for existing programs.

---

[12]Marett, J. R. *A computer program to norm AAHPERD Health Related Fitness Test scores.* Unpublished program: Northern Illinois University, 1981.

The duration of this project was originally 1 year (1980–81). Because of the continued interest (over 22,000 students tested during the period 1981–1982) on the part of school personnel throughout the state the project has been continued. This means that school districts or schools within districts can request this computerized fitness reporting service. While the project is non-profit in nature there are certain expenses associated with participation. Specifically, the cost of the opscan form, computer processing, and handling must be borne by the participating school(s). Processed and sorted information returned to participating schools includes computer printouts of composite fitness profiles as well as separate printouts for local and state norms. The total cost at the present time (11–19–82) is $.10 per form. This means a cost of $100 for every 1000 students tested. If you are interested please contact one of the authors at the Department of Physical Education, Anderson Hall, Northern Illinois University, DeKalb, IL, 60115 (815-753-1407).

Figure 5

AAHPERD Health-Related Fitness Test
State of Illinois 1982
National Percentile Score
School District #9999 School #1 Grade 9 Boys

Name	Age	Ht.	Wt.	Tricep Skinfold	Nat'l %	Sum of Skinfolds	Nat'l %	Sit-Ups	Nat'l %	Sit & Reach	Nat'l %	Run Type	Time or Dist	Nat'l %	Teacher Code	Sex
Names	14	75.0	130.0	5.0	90	8.0	97	42	50	48	99	1½ MI	12:14	34	•	M
cannot	14	65.0	115.0	25.0	4	29.0	13	47	68	31	70	1½ MI	10:24	73	•	M
be	15	68.0	142.0	4.0	95	10.0	90	42	45	48	99	1½ MI	11:20	53	•	M
printed	14	75.0	137.0	4.0	95	10.0	85	40	40	55	99	1½ MI	11:34	48	•	M
in	13	66.0	115.0	8.0	58	16.0	45	53	88	30	75	1½ MI	15:16	5	•	M
accordance	14	71.0	170.0	5.0	90	14.0	45	41	45	50	99	1½ MI	11:29	50	•	M
with	13	66.0	154.0	4.0	95	11.0	80	44	60	50	99	1½ MI	12:30	28	•	M
Privacy	14	62.0	240.0	25.0	4	29.0	13	40	40	53	99	1½ MI	9:40	85	•	M
Act	15	71.0	141.0	5.0	90	12.0	70	47	65	50	99	1½ MI	13:12	16	•	M
	13	62.0	100.0	8.0	58	14.0	55	43	58	38	97	1½ MI	11:36	47	•	M
	13	57.0	85.0	13.0	25	23.0	23	36	30	35	93	1½ MI	17:33	4	•	M
	14	64.0	120.0	5.0	90	12.0	65	45	60	50	99	1½ MI	15:24	5	•	M
	14	71.0	198.0	25.0	4	50.0	3	28	6	38	93	1½ MI	18:36	4	•	M
	14	66.0	150.0	6.0	75	15.0	40	58	94	53	99	1½ MI	14:09	6	•	M
	12	65.0	142.0	17.0	16	34.0	10	35	35	48	98	1½ MI	•	5	•	M
	14	65.0	105.0	10.0	33	35.0	7	47	68	48	99	1½ MI	9:57	81	•	M
	13	54.0	114.0	6.0	83	13.0	60	43	58	38	97	1½ MI	12:48	22	•	M
	14	60.0	88.0	10.0	33	15.0	40	53	88	45	99	1½ MI	13:39	46	•	M
	14	60.0	90.0	6.0	75	16.0	35	44	55	45	99	1½ MI	13:40	10	•	M
	14	62.0	120.0	10.0	33	20.0	25	47	68	60	99	1½ MI	20:00	3	•	M
	14	66.0	130.0	7.0	58	16.0	35	38	30	48	99	1½ MI	13:45	10	•	M
	15	64.0	130.0	4.0	95	12.0	70	56	91	53	99	1½ MI	11:44	44	•	M

IV. Health Fitness Norms for State of Illinois

The following tables delineate the health related physical fitness percentile norms for youth in the state of Illinois. Compilation of these data occurred during the years 1980–82. Total sample size exceeds 22,000 students from urban, suburban, and rural areas and is primarily representative of the northern section of the state.

Utilization of these norms allows for evaluation of students' fitness. The percentile rank represents the percentage of students in the sample who scored at or below the raw test score. For example*:

A ten-year old girl who completes 23 sit-ups falls at the 13 percentile. This means that only 13% of the ten-year old girls in the total sample

scored poorer on the sit-up test. In other words, 87% of the ten-year old girls in the total sample performed at a higher level.

**Refer to Illinois state norms for girls age 10*

With respect to all tests, the large percentiles are indicitive of higher levels of fitness. The authors refer readers to the *AAHPERD Health Related Physical Fitness Manual* for further comments on evaluating a student's physical fitness using normative data and a listing of national norms.

Reference List for Health Related Physical Fitness

AAHPERD. *AAHPERD Health Related Physical Fitness Test Manual.* Reston, Virginia: Author, 1980.

Allsen, P., Harrison, J., & Vance, B. *Fitness for life.* Dubuque: Wm. C. Brown, 1980.

Corbin, C. *A textbook of motor development.* Dubuque: Wm. C. Brown, 1973.

Corbin, C. & Lindsey, R. *Fitness for life.* Glenview, IL.: Scott, Foresman, 1979.

Corbin, C., Dowell, L., Lindsey, R. & Tolson, E. *Concepts in physical education.* Dubuque: Wm. C. Brown, 1981.

Cundiff, D. & Brynteson, P. *Health fitness guide to a lifestyle.* Dubuque: Kendal Hunt, 1979.

Cureton, K. Distance running performance tests in children: What do they mean? *JOPERD.* 53, (8): 64–66, October 1982.

Dauer, V. & Pangrazi, R. *Dynamic physical education for elementary school children.* Minneapolis: Burgess, 1979.

Falls, H. B. Modern concepts of physical fitness. *JOPER.* 51 (4): 25–27, April 1980.

Hockey, R. *Physical fitness—the pathway to healthful living.* St. Louis: C. V. Mosby, 1981.

Lohman, T. G. Measurement of body composition in children. *JOPERD.* 53 (8): 67–70, October 1982.

Lohman, T. G. & Pollock, M. L. Skinfold measurement: which caliper? How much training? *JOPER.* 52 (1): 27–29, 1981.

Miller, D. & Allen, T. *Fitness: a lifetime commitment.* Minneapolis: Burgess, 1979.

Nelson, D. *Dynamic fitness.* Logan, Utah: Utah State University, 1979.

Pate, R. & Corbin, C. Implications for the physical education curriculum. *JOPER.* 52 (1): 36–38, 1981.

Plowman, S. A. & Falls, H. B. AAHPER Youth Fitness Test revision: How fit? For what? *JOPER.* 49 (9): 22–24, November–December 1978.

Pollock, M. L. & Blair, S. N. Exercise prescription. *JOPER.* 52 (1): 30–35, 1981.

Stokes, R., Moore, A., Moore, C., & Williams, C. *Fitness: the new wave.* Winston-Salem: Hunter, 1981.

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS AGE=6

% TILE	TRICEP SKINFOLD MM (0326)	SUM OF SKINFOLDS (0220)	SIT & REACH (0327)	SIT-UPS (0328)	MILE RUN (0259)	% TILE	TRICEP SKINFOLD MM (0326)	SUM OF SKINFOLDS (0220)	SIT & REACH (0327)	SIT-UPS (0328)	MILE RUN (0259)
99	4.0	8.0	38	45	7:45	49	6.0	13.5	27	24	11:14
98	5.0	8.0	36	42	8:05	48	6.0	13.5	27	24	11:19
97	5.0	8.5	35	41	8:16	47	6.0	14.0	26	23	11:21
96	5.0	9.0	35	40	8:24	46	6.0	14.0	26	23	11:25
95	5.0	9.0	35	40	8:26	45	6.0	14.0	26	23	11:27
94	5.5	9.0	34	40	8:43	44	6.0	14.0	26	23	11:30
93	6.0	9.5	34	39	8:55	43	6.5	14.0	26	23	11:36
92	6.0	10.0	33	38	9:00	42	6.5	14.0	26	22	11:42
91	6.0	10.0	33	38	9:06	41	6.5	14.0	26	22	11:45
90	6.0	10.0	33	38	9:09	40	9.0	14.0	26	22	11:50
89	6.0	10.0	33	36	9:14	39	9.0	14.0	26	22	11:57
88	6.0	10.0	33	36	9:18	38	9.0	14.0	25	21	12:00
87	6.0	10.5	32	35	9:19	37	9.0	14.0	25	21	12:03
86	6.0	10.5	32	35	9:22	36	9.0	14.5	25	21	12:05
85	6.0	10.5	31	34	9:24	35	9.0	14.5	25	21	12:07
84	6.0	10.5	31	34	9:26	34	9.0	15.0	25	21	12:09
83	6.0	11.0	31	33	9:30	33	9.0	15.0	25	20	12:11
82	6.0	11.0	31	33	9:35	32	9.0	15.0	24	20	12:13
81	6.0	11.0	31	33	9:36	31	9.0	15.0	24	20	12:19
80	6.0	11.0	31	32	9:39	30	9.0	15.0	24	20	12:21
79	6.5	11.0	30	32	9:40	29	9.5	15.0	24	20	12:26
78	6.5	11.0	30	31	9:42	28	9.5	15.5	24	19	12:30
77	6.5	11.0	30	31	9:46	27	10.0	15.5	24	19	12:37
76	7.0	11.0	30	30	9:50	26	10.0	16.0	23	18	12:41
75	7.0	11.0	30	30	9:54	25	10.0	16.0	23	18	12:55
74	7.0	11.5	30	30	9:57	24	10.0	16.0	23	17	12:59
73	7.0	11.5	30	30	10:00	23	10.0	16.0	23	17	13:00
72	7.0	12.0	29	30	10:01	22	10.0	16.0	23	16	13:05
71	7.0	12.0	29	30	10:02	21	10.0	17.0	23	16	13:14
70	7.0	12.0	29	30	10:05	20	10.0	17.0	22	16	13:21
69	7.0	12.0	29	29	10:09	19	10.0	17.0	22	16	13:34
68	7.0	12.0	29	29	10:10	18	10.5	17.0	22	15	13:47
67	7.0	12.0	29	29	10:12	17	11.0	17.0	22	14	14:16
66	7.0	12.0	29	29	10:15	16	11.0	17.5	22	14	14:25
65	7.0	12.0	29	29	10:19	15	11.0	18.0	22	13	14:30
64	7.0	12.0	29	28	10:22	14	11.0	18.0	21	13	14:50
63	7.0	12.0	29	28	10:25	13	11.0	18.5	21	13	14:58
62	7.0	12.5	28	28	10:28	12	11.0	19.0	21	12	15:18
61	7.0	12.5	28	27	10:33	11	11.0	19.0	21	12	15:29
60	7.5	12.5	28	27	10:35	10	11.5	19.5	21	12	15:34
59	7.5	12.5	28	27	10:36	9	12.0	21.0	20	11	15:37
58	8.0	13.0	28	26	10:40	8	12.0	20.5	20	10	15:58
57	8.0	13.0	28	26	10:43	7	12.0	21.0	19	9	16:05
56	8.0	13.0	28	26	10:49	6	12.5	22.0	19	8	16:39
55	8.0	13.0	27	26	10:55	5	13.0	24.0	18	7	17:50
54	8.0	13.0	27	26	10:58	4	14.0	26.0	18	5	18:14
53	8.0	13.0	27	25	11:00	3	15.0	26.5	18	4	19:12
52	8.0	13.0	27	25	11:00	2	16.5	27.0	16	2	20:20
51	8.0	13.0	27	25	11:10	1	20.5	36.5	13	0	21:21
50	8.0	13.0	27	25	11:12						

GIRLS AGE=6

% TILE	TRICEP SKINFOLD MM (0367)	SUM OF SKINFOLDS (0246)	SIT & REACH (0361)	SIT-UPS (0372)	MILE RUN (0328)	% TILE	TRICEP SKINFOLD MM (0367)	SUM OF SKINFOLDS (0246)	SIT & REACH (0361)	SIT-UPS (0372)	MILE RUN (0328)
99	5.0	9.0	40	46	7:55	49	10.0	15.5	29	24	11:22
98	5.5	9.0	39	41	8:32	48	10.0	15.5	28	23	11:24
97	6.0	9.0	38	39	9:04	47	10.0	15.5	28	23	11:32
96	6.0	10.0	37	38	9:13	46	10.0	16.0	28	23	11:35
95	6.0	10.0	36	37	9:27	45	10.0	16.0	28	23	11:37
94	6.0	10.5	36	37	9:35	44	10.0	16.0	28	22	11:41
93	6.5	11.0	35	36	9:41	43	10.0	16.0	27	22	11:44
92	7.0	11.0	35	36	9:45	42	10.0	16.0	27	22	11:48
91	7.0	11.0	35	35	9:48	41	10.0	16.0	27	22	11:50
90	7.0	11.0	34	35	10:00	40	10.0	16.0	27	22	11:53
89	7.0	11.0	34	35	10:01	39	10.5	16.0	27	22	11:55
88	7.0	12.0	34	34	10:07	38	10.5	16.5	27	22	11:57
87	7.0	12.0	34	34	10:09	37	11.0	17.0	27	21	11:59
86	7.0	12.0	34	33	10:15	36	11.0	17.0	27	21	13:07
85	7.0	12.0	34	33	10:16	35	11.0	17.0	27	21	13:15
84	7.0	12.0	33	32	10:19	34	11.0	17.0	27	21	13:19
83	7.0	12.5	33	32	10:19	33	11.0	17.5	26	20	13:25
82	7.0	12.5	33	31	10:20	32	11.0	18.0	26	20	13:32
81	7.5	12.5	33	31	10:24	31	11.0	18.0	26	20	13:37
80	7.5	12.5	33	31	10:30	30	11.0	18.0	26	20	13:43
79	8.0	13.0	32	31	10:30	29	11.0	18.0	26	20	13:46
78	8.0	13.0	32	31	10:41	28	11.0	18.0	26	20	13:52
77	8.0	13.0	32	30	10:43	27	11.0	18.0	26	19	13:54
76	8.0	13.0	32	30	10:45	26	11.5	18.5	25	19	13:58
75	8.0	13.0	32	30	10:47	25	11.5	19.0	25	19	14:10
74	8.0	13.0	32	29	10:51	24	12.0	19.0	25	18	14:15
73	8.0	13.0	31	29	10:54	23	12.0	19.0	25	18	14:21
72	8.0	13.0	31	29	10:59	22	12.0	20.0	25	18	14:30
71	8.0	13.5	31	29	11:02	21	12.0	20.0	24	17	14:36
70	8.0	13.5	31	28	11:07	20	12.0	20.5	24	17	14:38
69	8.0	14.0	31	28	11:10	19	12.5	21.0	24	17	14:40
68	8.5	14.0	31	28	11:14	18	13.0	21.0	24	16	14:50
67	8.5	14.0	31	28	11:16	17	13.0	22.0	24	16	14:55
66	8.5	14.0	30	28	11:20	16	13.0	22.0	23	16	15:04
65	9.0	14.0	30	27	11:23	15	13.0	22.0	23	16	15:22
64	9.0	14.0	30	27	11:27	14	13.0	24.0	23	15	15:34
63	9.0	14.0	30	27	11:31	13	13.5	24.0	22	15	15:45
62	9.0	14.0	30	26	11:35	12	14.0	25.0	22	15	15:55
61	9.0	14.0	30	26	11:37	11	14.0	25.0	22	14	16:25
60	9.0	14.5	30	26	11:40	10	14.0	25.0	22	14	16:30
59	9.0	14.5	30	26	11:45	9	15.0	26.0	22	13	16:55
58	9.0	15.0	30	26	11:50	8	15.0	26.5	21	12	17:17
57	9.0	15.0	30	26	11:52	7	15.0	27.0	21	12	17:23
56	9.0	15.0	30	25	11:55	6	15.5	28.0	20	10	17:51
55	9.0	15.0	29	25	11:59	5	16.0	28.5	20	10	18:11
54	9.5	15.0	29	25	12:01	4	17.0	30.0	19	9	18:35
53	9.5	15.0	29	25	12:03	3	17.0	32.0	18	5	19:34
52	9.5	15.0	29	24	12:09	2	18.5	34.5	17	4	20:24
51	10.0	15.0	29	24	12:11	1	19.5	43.0	16	2	23:16
50	10.0	15.5	29	24	12:15						

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS — AGE=7

% TILE	TRICEP SKINFOLD N= (0586)	SUM OF SKINFOLDS (0326)	SIT & REACH (0582)	SIT-UPS (0575)	MILE RUN (0533)	% TILE	TRICEP SKINFOLD N= (0586)	SUM OF SKINFOLDS (0326)	SIT & REACH (0582)	SIT-UPS (0575)	MILE RUN (0533)
99	4.0	8.5	36	55	7:22	49	8.0	14.0	26	28	10:45
98	5.0	9.0	36	51	7:57	48	8.0	14.0	26	27	10:48
97	5.0	9.0	35	50	8:00	47	8.0	14.0	26	27	10:50
96	5.0	9.0	34	47	8:03	46	8.0	14.0	26	27	10:55
95	5.5	10.0	34	45	8:08	45	8.5	14.5	26	26	10:55
94	6.0	10.0	34	43	8:10	44	8.5	14.5	26	26	11:03
93	6.0	10.0	34	42	8:17	43	9.0	14.5	26	26	11:06
92	6.0	10.5	33	42	8:23	42	9.0	15.0	25	26	11:08
91	6.0	10.5	33	41	8:27	41	9.0	15.0	25	26	11:13
90	6.0	10.5	33	40	8:30	40	9.0	15.0	25	25	11:15
89	6.0	11.0	33	40	8:39	39	9.0	15.0	25	25	11:23
88	6.0	11.0	32	40	8:42	38	9.0	15.0	25	25	11:27
87	6.0	11.0	32	39	8:46	37	9.0	15.5	24	25	11:30
86	6.0	11.0	32	35	8:51	36	9.0	15.5	24	24	11:32
85	6.0	11.0	31	38	8:54	35	9.0	16.0	24	24	11:34
84	6.5	11.0	31	38	8:56	34	9.0	16.0	24	24	11:40
83	6.5	11.0	31	37	9:00	33	9.0	16.0	24	24	11:44
82	7.0	11.0	31	37	9:05	32	9.5	16.0	24	23	11:50
81	7.0	11.0	31	37	9:09	31	9.5	16.0	24	23	11:56
80	7.0	11.0	31	36	9:11	30	10.0	16.0	24	23	12:01
79	7.0	11.5	30	36	9:15	29	10.0	16.0	23	23	12:05
78	7.0	11.5	30	35	9:17	28	10.0	16.5	23	22	12:08
77	7.0	11.5	30	35	9:20	27	10.0	16.5	23	22	12:13
76	7.0	11.5	30	35	9:22	26	10.0	17.0	23	22	12:17
75	7.0	12.0	30	34	9:28	25	10.0	17.0	23	22	12:23
74	7.0	12.0	29	34	9:29	24	10.0	17.0	23	21	12:30
73	7.0	12.0	29	33	9:30	23	10.0	17.0	23	21	12:34
72	7.0	12.0	29	33	9:32	22	10.0	17.5	23	21	12:43
71	7.0	12.0	29	33	9:33	21	10.0	18.0	22	20	12:47
70	7.0	12.0	29	32	9:36	20	11.0	18.0	22	20	12:57
69	7.0	12.0	29	32	9:40	19	11.0	20.0	22	20	13:05
68	7.0	12.0	29	32	9:42	18	11.0	20.0	22	20	13:10
67	7.0	12.0	29	31	9:47	17	11.0	20.0	21	19	13:17
66	7.0	12.0	29	31	9:50	16	11.0	21.0	21	18	13:26
65	7.0	12.5	28	31	9:53	15	11.5	23.0	21	18	13:30
64	7.0	12.5	28	31	9:55	14	12.0	23.5	21	18	13:36
63	7.5	12.5	28	30	9:59	13	12.0	24.0	20	17	13:42
62	7.5	12.5	28	30	10:00	12	12.0	24.5	20	16	13:52
61	7.5	13.0	28	30	10:04	11	12.0	25.0	20	16	14:01
60	7.5	13.0	28	30	10:09	10	13.0	25.5	20	15	14:12
59	8.0	13.0	28	30	10:13	9	13.0	26.0	19	15	14:29
58	8.0	13.0	28	30	10:15	8	13.0	26.5	19	14	14:44
57	8.0	13.0	27	29	10:21	7	14.0	27.0	19	13	15:00
56	8.0	13.0	27	29	10:22	6	14.0	28.0	18	13	15:21
55	8.0	13.5	27	29	10:25	5	15.0	29.5	17	12	15:37
54	8.0	13.5	27	29	10:28	4	16.0	32.0	16	12	15:46
53	8.0	13.5	27	29	10:30	3	16.0	32.5	16	8	16:06
52	8.0	14.0	27	29	10:32	2	17.0	35.0	15	2	16:40
51	8.0	14.0	27	28	10:36	1	19.5	37.5	13	0	18:20
50	8.0	14.0	26	28	10:41						

GIRLS AGE=7

% TILE	TRICEP SKINFOLD Nm (0652)	SUM OF SKINFOLDS (0350)	SIT & REACH (0644)	SIT-UPS (0619)	MILE RUN (0607)	% TILE	TRICEP SKINFOLD Nm (0652)	SUM OF SKINFOLDS (0350)	SIT & REACH (0644)	SIT-UPS (0619)	MILE RUN (0607)
99	5.0	9.0	40	40	8108	49	10.0	16.0	29	27	11153
98	5.5	9.5	38	47	8133	48	10.0	16.0	28	27	11157
97	6.0	10.0	37	44	8150	47	10.0	16.0	28	26	12100
96	6.0	10.0	36	42	8158	46	10.0	16.0	28	26	12104
95	6.0	10.5	36	42	9106	45	10.0	16.5	28	26	12108
94	6.0	11.0	35	41	9112	44	10.0	16.5	28	26	12110
93	6.5	11.0	35	40	9121	43	10.0	16.5	28	26	12114
92	7.0	11.0	35	40	9131	42	10.0	17.0	28	26	12119
91	7.0	11.0	35	39	9136	41	10.0	17.0	27	26	12122
90	7.0	11.0	35	38	9144	40	10.0	17.0	27	25	12130
89	7.0	11.5	34	38	9146	39	10.0	17.0	27	25	12131
88	7.0	11.5	34	37	9148	38	10.0	17.0	27	24	12136
87	7.0	12.0	34	37	9154	37	10.0	17.0	27	24	12138
86	7.0	12.0	34	36	9158	36	10.5	17.5	27	24	12146
85	7.0	12.0	34	35	10103	35	11.0	17.5	27	24	12150
84	7.0	12.0	33	35	10104	34	11.0	17.5	26	24	12158
83	7.0	12.0	33	35	10108	33	11.0	18.0	26	23	13100
82	7.0	12.0	33	35	10113	32	11.0	18.0	26	23	13104
81	7.0	12.0	33	34	10116	31	11.0	18.0	26	23	13107
80	7.5	12.0	33	34	10122	30	11.0	18.5	26	23	13110
79	7.5	12.5	33	33	10123	29	11.0	19.0	26	22	13113
78	8.0	12.5	33	33	10126	28	11.0	19.0	25	22	13120
77	8.0	13.0	32	33	10130	27	11.5	19.0	25	22	13122
76	8.0	13.0	32	32	10133	26	11.5	19.0	25	21	13129
75	8.0	13.0	32	32	10135	25	12.0	19.0	25	21	13133
74	8.0	13.0	32	32	10137	24	12.0	19.0	25	21	13138
73	8.0	13.0	32	32	10142	23	12.0	19.5	25	21	13141
72	8.0	13.0	32	31	10145	22	12.0	20.0	25	20	13147
71	8.0	13.0	32	31	10146	21	12.0	20.0	24	20	13150
70	8.0	13.5	31	31	10152	20	12.0	20.5	24	20	13158
69	8.0	13.5	31	31	10153	19	12.0	21.0	24	20	14103
68	8.0	13.5	31	31	10156	18	12.0	22.0	24	20	14108
67	8.0	13.5	31	31	11100	17	13.0	22.0	24	20	14118
66	8.5	14.0	31	30	11106	16	13.0	23.0	23	20	14129
65	8.5	14.0	31	30	11103	15	13.0	23.0	23	19	14140
64	8.5	14.0	31	30	11105	14	13.0	23.5	23	19	14147
63	9.0	14.0	31	30	11106	13	13.0	24.0	23	19	14155
62	9.0	14.0	30	30	11112	12	14.0	25.0	23	18	15108
61	9.0	14.0	30	30	11116	11	14.0	25.5	22	18	15112
60	9.0	14.0	30	29	11120	10	14.5	26.0	22	17	15124
59	9.0	14.5	30	29	11122	9	14.5	27.0	22	17	15140
58	9.0	14.5	30	29	11127	8	15.0	28.0	22	16	16148
57	9.0	15.0	30	29	11134	7	15.0	28.0	22	15	16111
56	9.0	15.0	30	29	11136	6	16.0	29.0	21	15	16121
55	9.0	15.0	30	28	11140	5	16.0	31.0	21	14	16144
54	9.0	15.0	29	28	11141	4	17.0	33.0	20	12	17101
53	9.0	15.0	29	28	11144	3	18.0	34.0	19	11	17230
52	9.0	15.5	29	28	11145	2	19.0	36.0	18	8	17144
51	9.0	15.5	29	27	11148	1	22.0	41.0	15	5	18240
50	9.5	16.0	29	27	11150						

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS AGE=8

% TILE	TRICEP SKINFOLD NO (0718)	SUM OF SKINFOLDS (0403)	SIT & REACH (0726)	SIT-UPS (0719)	MILE RUN (0697)	% TILE	TRICEP SKINFOLD NO (0718)	SUM OF SKINFOLDS (0403)	SIT & REACH (0726)	SIT-UPS (0719)	MILE RUN (0697)
99	4.0	8.5	37	55	6313	49	8.5	15.0	26	31	10100
98	5.0	9.0	36	50	6328	48	9.0	15.0	26	30	10103
97	5.0	9.0	35	48	6348	47	9.0	15.0	26	30	10106
96	5.0	9.0	35	47	7118	46	9.0	15.0	25	30	10110
95	5.0	9.5	34	46	7123	45	9.0	15.0	25	30	10112
94	5.5	10.0	34	45	7132	44	9.0	15.0	25	30	10115
93	6.0	10.0	34	45	7139	43	9.0	15.0	25	30	10118
92	6.0	10.0	33	44	7143	42	9.0	15.0	25	29	10125
91	6.0	10.0	33	43	7148	41	9.0	15.5	25	29	10127
90	6.0	10.0	32	43	7150	40	9.0	16.0	25	29	10130
89	6.0	10.5	32	42	7155	39	9.0	16.0	25	29	10134
88	6.0	10.5	32	41	8101	38	9.0	16.0	24	29	10138
87	6.0	11.0	32	40	8104	37	9.5	16.0	24	28	10142
86	6.0	11.0	32	40	8107	36	10.0	16.0	24	28	10144
85	6.0	11.0	31	40	8111	35	10.0	16.5	24	28	10147
84	6.0	11.0	31	40	8117	34	10.0	16.5	24	27	10152
83	6.5	11.0	31	39	8120	33	10.0	16.5	24	27	10154
82	6.5	11.0	31	39	8124	32	10.0	17.0	24	27	10158
81	7.0	11.0	30	39	8126	31	10.0	17.0	23	27	11102
80	7.0	11.5	30	38	8130	30	10.0	17.0	23	26	11106
79	7.0	11.5	30	38	8133	29	10.0	17.0	23	26	11110
78	7.0	11.5	30	38	8135	28	10.0	17.5	23	26	11112
77	7.0	12.0	30	37	8138	27	10.0	18.0	23	25	11115
76	7.0	12.0	30	37	8139	26	10.5	18.0	23	25	11121
75	7.0	12.0	29	37	8141	25	10.5	19.0	22	25	11124
74	7.0	12.0	29	36	8144	24	11.0	19.0	22	24	11125
73	7.0	12.0	29	36	8146	23	11.0	19.5	22	24	11132
72	7.0	12.0	29	36	8148	22	11.0	20.0	22	23	11136
71	7.0	12.0	29	36	8150	21	11.0	20.0	22	23	11142
70	7.0	12.5	29	35	8153	20	11.5	20.5	22	23	11146
69	7.0	12.5	28	35	8156	19	12.0	21.0	21	22	11154
68	7.0	12.5	28	35	8158	18	12.0	21.5	21	22	12100
67	7.5	13.0	28	35	9101	17	12.0	22.0	21	22	12105
66	7.5	13.0	28	35	9104	16	12.0	23.0	20	21	12111
65	7.5	13.0	28	34	9106	15	12.5	23.5	20	21	12115
64	8.0	13.0	28	34	9110	14	13.0	24.5	20	20	12126
63	8.0	13.0	27	34	9114	13	13.0	25.0	20	20	12132
62	8.0	13.0	27	34	9117	12	13.5	25.5	20	20	12142
61	8.0	13.5	27	33	9119	11	14.0	26.0	19	20	12148
60	8.0	13.5	27	33	9122	10	14.0	26.5	19	20	12151
59	8.0	14.0	27	33	9125	9	15.0	27.0	18	19	13103
58	8.0	14.0	27	33	9126	8	15.0	28.0	18	18	13122
57	8.0	14.0	27	32	9133	7	16.0	29.0	17	17	13241
56	8.0	14.0	27	32	9136	6	16.0	30.5	17	16	14102
55	8.0	14.0	26	32	9137	5	17.0	33.0	17	16	14219
54	8.0	14.0	26	32	9141	4	18.0	35.0	16	15	14246
53	8.0	14.0	26	31	9144	3	19.0	37.5	14	13	15214
52	8.0	14.5	26	31	9147	2	21.0	43.0	14	10	15136
51	8.5	14.5	26	31	9152	1	24.0	47.5	11	4	17100
50	8.5	15.0	26	31	9158						

GIRLS AGE=8

% TILE	TRICEP SKINFOLD N= (0649)	SUM OF SKINFOLDS (0341)	SIT & REACH (0659)	SIT-UPS (0654)	MILE RUN (0627)	% TILE	TRICEP SKINFOLD N= (0649)	SUM OF SKINFOLDS (0341)	SIT & REACH (0659)	SIT-UPS (0654)	MILE RUN (0627)
99	4.0	9.5	40	55	6:26	49	10.0	17.5	29	30	11:21
98	5.0	10.0	38	50	7:03	48	10.5	18.0	28	30	11:25
97	5.5	10.0	37	49	7:44	47	10.5	18.0	28	29	11:30
96	6.0	11.0	37	48	8:06	46	11.0	18.0	28	29	11:33
95	6.0	11.0	36	46	8:14	45	11.0	18.0	28	29	11:35
94	6.0	11.0	36	45	8:25	44	11.0	18.5	28	29	11:38
93	6.5	11.0	36	44	8:32	43	11.0	19.0	28	29	11:44
92	7.0	11.0	35	44	8:40	42	11.0	19.0	28	28	11:46
91	7.0	11.5	35	43	8:48	41	11.0	19.0	27	28	11:54
90	7.0	12.0	35	42	8:50	40	11.0	19.0	27	28	11:57
89	7.0	12.0	34	42	8:57	39	11.0	19.5	27	27	12:00
88	7.0	12.0	34	41	9:04	38	11.5	19.5	27	27	12:06
87	7.0	12.5	34	40	9:07	37	11.5	19.5	27	27	12:15
86	7.0	12.5	34	40	9:14	36	12.0	20.0	27	27	12:16
85	7.0	13.0	34	40	9:17	35	12.0	20.0	27	26	12:22
84	7.0	13.0	33	40	9:20	34	12.0	20.0	26	26	12:25
83	7.5	13.0	33	39	9:25	33	12.0	20.5	26	26	12:28
82	8.0	13.0	33	39	9:28	32	12.0	21.0	26	26	12:30
81	8.0	13.5	32	39	9:34	31	12.0	21.5	26	25	12:34
80	8.0	13.5	32	38	9:38	30	12.0	22.0	26	25	12:40
79	8.0	14.0	32	38	9:44	29	12.5	22.0	26	25	12:42
78	8.0	14.0	32	37	9:47	28	12.5	22.5	26	24	12:47
77	8.0	14.0	32	37	9:50	27	13.0	23.0	25	24	12:50
76	8.0	14.0	32	36	9:54	26	13.0	23.0	25	24	12:54
75	8.0	14.0	32	36	10:00	25	13.0	23.0	25	24	12:58
74	8.5	14.5	31	36	10:04	24	13.0	24.0	25	23	13:02
73	9.0	15.0	31	35	10:10	23	13.0	24.0	25	23	13:06
72	9.0	15.0	31	35	10:12	22	13.0	24.5	24	22	13:10
71	9.0	15.0	31	35	10:15	21	14.0	25.0	24	22	13:15
70	9.0	15.0	31	34	10:17	20	14.0	25.0	24	22	13:21
69	9.0	15.0	31	34	10:19	19	14.0	25.0	24	21	13:26
68	9.0	15.0	31	34	10:21	18	14.0	25.5	24	21	13:32
67	9.0	15.0	31	33	10:23	17	14.5	26.0	24	21	13:35
66	9.0	15.0	31	33	10:30	16	15.0	27.0	23	20	13:44
65	9.0	16.0	30	33	10:33	15	15.0	27.0	23	20	13:50
64	9.0	16.0	30	33	10:38	14	15.0	27.5	23	20	14:00
63	9.0	16.0	30	33	10:41	13	15.0	28.0	23	20	14:02
62	9.5	16.0	30	33	10:45	12	16.0	29.5	22	19	14:07
61	10.0	16.5	30	32	10:45	11	16.0	30.0	22	17	14:18
60	10.0	16.5	30	32	10:47	10	16.0	31.0	22	17	14:25
59	10.0	17.0	30	32	10:49	9	17.0	31.0	21	16	14:39
58	10.0	17.0	30	31	10:53	8	17.0	32.5	21	16	14:48
57	10.0	17.0	30	31	10:55	7	18.0	33.5	21	15	15:10
56	10.0	17.0	30	31	10:59	6	18.0	34.0	20	14	15:22
55	10.0	17.0	29	31	11:03	5	19.0	35.0	20	13	15:35
54	10.0	17.0	29	30	11:06	4	20.0	37.5	19	12	15:52
53	10.0	17.0	29	30	11:10	3	21.0	40.0	18	11	16:21
52	10.0	17.5	29	30	11:12	2	21.5	43.0	17	8	16:39
51	10.0	17.5	29	30	11:16	1	24.0	53.0	14	4	17:42
50	10.0	17.5	29	30	11:18						

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS — AGE=9

% TILE	TRICEP SKINFOLD Nm (0859)	SUM OF SKINFOLDS (0531)	SIT & REACH (0867)	SIT-UPS (0869)	MILE RUN (0821)	% TILE	TRICEP SKINFOLD Nm (0859)	SUM OF SKINFOLDS (0531)	SIT & REACH (0867)	SIT-UPS (0869)	MILE RUN (0821)
99	4.0	8.0	39	56	6184	49	9.0	18.0	28	34	9123
98	4.5	9.0	37	54	6148	48	9.0	18.0	28	34	9127
97	5.0	9.5	36	52	7102	47	9.0	18.0	25	33	9130
96	5.0	10.0	35	50	7114	46	9.5	18.5	25	33	9134
95	5.0	10.0	35	49	7121	45	9.5	18.5	25	33	9137
94	6.0	10.0	34	48	7123	44	10.0	18.5	25	32	9140
93	6.0	10.0	33	47	7126	43	10.0	18.0	25	32	9143
92	6.0	10.5	33	47	7130	42	10.0	18.0	24	32	9146
91	6.0	10.5	33	46	7135	41	10.0	18.0	24	32	9152
90	6.0	11.0	33	45	7141	40	10.0	18.0	24	31	9154
89	6.0	11.0	32	45	7144	39	10.0	18.0	24	31	9158
88	6.0	11.0	32	44	7148	38	10.0	18.5	24	31	10100
87	6.5	11.0	32	44	7150	37	10.0	17.0	24	30	10104
86	6.5	11.0	31	43	7153	36	10.0	17.0	23	30	10106
85	6.5	11.5	31	43	7157	35	10.0	17.0	23	30	10108
84	7.0	11.5	31	43	7159	34	10.5	17.0	23	30	10110
83	7.0	11.5	30	42	8101	33	11.0	17.5	23	30	10112
82	7.0	11.5	30	42	8103	32	11.0	18.0	23	30	10117
81	7.0	12.0	30	42	8105	31	11.0	18.0	23	29	10123
80	7.0	12.0	30	41	8108	30	11.0	18.0	23	29	10125
79	7.0	12.0	30	41	8111	29	11.0	18.0	22	29	10129
78	7.0	12.0	30	41	8115	28	11.0	18.5	22	28	10134
77	7.0	12.0	29	40	8119	27	11.0	19.0	22	28	10140
76	7.0	12.0	29	40	8121	26	11.5	19.0	22	28	10143
75	7.0	12.5	29	40	8124	25	12.0	19.0	22	28	10146
74	7.0	12.5	29	40	8125	24	12.0	19.0	22	27	10150
73	7.0	12.5	29	40	8129	23	12.0	19.5	21	27	10156
72	7.0	12.5	29	39	8131	22	12.0	20.0	21	27	11103
71	7.5	12.5	29	39	8134	21	12.0	20.0	21	26	11110
70	7.5	13.0	28	39	8136	20	12.5	21.0	21	26	11114
69	7.5	13.0	28	38	8138	19	13.0	21.0	21	25	11125
68	8.0	13.0	28	38	8140	18	13.0	21.0	20	25	11130
67	8.0	13.0	28	38	8142	17	13.0	21.5	20	25	11138
66	8.0	13.0	28	38	8145	16	13.0	22.0	20	24	11141
65	8.0	13.0	28	37	8150	15	14.0	23.0	20	24	11146
64	8.0	13.0	27	37	8151	14	14.0	23.5	19	23	11150
63	8.0	13.5	27	37	8153	13	14.0	24.0	19	23	12105
62	8.0	13.5	27	36	8155	12	14.5	24.5	19	22	12110
61	8.0	13.5	27	36	8157	11	15.0	25.0	19	21	12122
60	8.0	14.0	27	36	8158	10	15.0	26.0	18	20	12128
59	8.5	14.0	27	36	9100	9	16.0	26.5	18	20	12133
58	8.5	14.0	27	36	9101	8	16.0	29.0	17	19	12143
57	8.5	14.0	26	36	9105	7	17.0	30.5	17	19	12154
56	9.0	14.0	26	36	9110	6	18.0	31.0	16	18	13103
55	9.0	14.0	26	35	9111	5	18.5	32.0	15	17	13128
54	9.0	14.5	26	35	9114	4	20.0	34.0	15	16	13180
53	9.0	14.5	26	35	9115	3	21.0	40.5	14	14	14132
52	9.0	15.0	26	35	9117	2	23.0	44.5	12	12	15137
51	9.0	15.0	26	35	9119	1	26.0	51.5	11	8	16133

GIRLS AGE=9

% TILE	TRICEP SKINFOLD N= (0808)	SUM OF SKINFOLDS (0525)	SIT & REACH (0811)	SIT-UPS (0805)	MILE RUN (0751)	% TILE	TRICEP SKINFOLD N= (0808)	SUM OF SKINFOLDS (0525)	SIT & REACH (0811)	SIT-UPS (0805)	MILE RUN (0751)
99	5.0	10.0	41	53	6123	49	11.5	19.5	28	31	11204
98	6.0	11.0	39	51	7104	48	12.0	20.0	28	31	11209
97	6.0	11.0	38	50	7145	47	12.0	20.0	28	31	11213
96	7.0	11.0	38	48	7155	46	12.0	20.0	28	31	11218
95	7.0	11.5	37	47	8168	45	12.0	20.0	28	30	11221
94	7.0	11.5	37	46	8125	44	12.0	20.0	28	30	11224
93	7.0	12.0	36	45	8130	43	12.0	20.5	28	30	11229
92	7.0	12.0	36	45	8134	42	12.0	21.0	27	30	11230
91	7.0	12.0	36	44	8144	41	12.0	21.0	27	30	11233
90	7.0	12.5	35	43	8148	40	13.0	22.0	27	29	11235
89	7.5	13.0	35	43	8156	39	13.0	22.0	27	29	11240
88	8.0	13.0	35	42	9102	38	13.0	22.0	27	29	11246
87	8.0	13.0	35	42	9111	37	13.0	22.5	27	29	11250
86	8.0	13.0	34	41	9115	36	13.0	23.0	27	29	11251
85	8.0	13.5	34	41	9115	35	13.0	23.0	26	28	11255
84	8.0	13.5	34	41	9120	34	14.0	23.0	26	28	11257
83	8.0	13.5	33	40	9126	33	13.5	23.5	26	28	12101
82	8.0	14.0	33	40	9130	32	14.0	24.0	26	27	12105
81	8.0	14.0	33	39	9132	31	14.0	24.0	26	27	12108
80	8.0	14.0	33	39	9136	30	14.0	24.0	25	27	12110
79	8.5	14.5	33	39	9140	29	14.5	24.5	25	27	12112
78	9.0	14.5	32	38	9143	28	14.5	25.0	25	26	12115
77	9.0	15.0	32	38	9145	27	14.5	25.0	25	26	12122
76	9.0	15.0	32	38	9152	26	15.0	25.5	25	26	12127
75	9.0	15.0	32	37	9156	25	15.0	26.0	25	26	12132
74	9.0	15.5	32	37	9158	24	15.0	26.0	24	25	12137
73	9.0	15.5	32	37	10100	23	15.0	26.5	24	25	12141
72	9.0	15.5	32	36	10105	22	15.0	27.0	24	24	12145
71	9.0	16.0	31	36	10109	21	15.5	27.0	24	24	12153
70	9.5	16.0	31	36	10110	20	15.5	28.0	23	24	13101
69	9.5	16.0	31	36	10112	19	16.0	28.0	23	24	13104
68	10.0	16.0	31	35	10115	18	16.0	28.5	23	23	13110
67	10.0	16.0	31	35	10118	17	16.0	29.0	23	23	13113
66	10.0	16.5	30	35	10121	16	16.5	29.5	22	23	13120
65	10.0	16.5	30	35	10125	15	17.0	31.0	22	22	13123
64	10.0	17.0	30	34	10130	14	17.0	31.0	22	22	13139
63	10.0	17.0	30	34	10130	13	17.0	32.5	22	21	13140
62	10.0	17.0	30	34	10135	12	17.0	33.0	21	21	13146
61	10.0	17.5	30	34	10137	11	18.0	34.0	21	21	13157
60	10.0	18.0	30	33	10135	10	18.0	35.5	21	20	14102
59	10.5	18.0	30	33	10143	9	19.0	38.0	20	19	14116
58	11.0	18.0	30	33	10145	8	19.5	36.5	20	18	14127
57	11.0	18.0	29	33	10146	7	20.0	38.5	20	16	14132
56	11.0	18.0	29	33	10149	6	21.0	40.0	19	17	14152
55	11.0	18.5	29	32	10151	5	22.0	41.0	18	16	15102
54	11.0	18.5	29	32	10153	4	22.0	43.0	17	15	15121
53	11.0	19.0	29	32	10155	3	23.0	44.0	16	12	16110
52	11.0	19.0	29	32	10157	2	25.0	48.0	15	10	17100
51	11.0	19.0	29	32	10158	1	28.0	53.0	13	6	17149
50	11.5	19.0	28	31	11100						

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS — AGE=10

% TILE	TRICEP SKINFOLD N= (0579)	SUM OF SKINFOLDS (0816)	SIT & REACH (0984)	SIT-UPS (0947)	MILE RUN (0568)	% TILE	TRICEP SKINFOLD N= (0579)	SUM OF SKINFOLDS (0816)	SIT & REACH (0984)	SIT-UPS (0947)	MILE RUN (0568)
99	5.0	9.0	38	60	8126	49	9.5	15.5	25	36	910:
98	5.0	9.0	36	58	8140	48	10.0	16.0	25	36	9103
97	5.0	9.5	36	55	8102	47	10.0	16.0	25	36	9105
96	5.5	10.0	35	53	8128	46	10.0	16.0	25	35	9107
95	6.0	10.0	34	52	8247	45	10.0	16.0	25	35	9109
94	6.0	10.0	34	51	7101	44	10.0	16.0	25	35	9111
93	6.0	10.5	33	50	7110	43	10.0	16.5	25	35	9113
92	6.0	10.5	33	50	7113	42	10.0	16.5	25	35	9116
91	6.0	11.0	33	49	7118	41	10.0	17.0	24	34	9119
90	6.0	11.0	32	48	7121	40	10.0	17.0	24	34	9121
89	6.5	11.0	32	48	7123	39	10.5	17.0	24	34	9123
88	6.5	11.0	32	48	7126	38	11.0	17.0	24	33	9126
87	7.0	11.0	32	47	7130	37	11.0	17.5	24	33	9130
86	7.0	11.5	31	47	7133	36	11.0	18.0	23	33	9134
85	7.0	11.5	31	47	7134	35	11.0	18.5	23	32	9139
84	7.0	11.5	31	46	7135	34	11.0	18.5	23	32	9140
83	7.0	11.5	31	46	7138	33	11.5	19.0	23	32	9146
82	7.0	12.0	30	45	7140	32	12.0	19.0	23	32	9150
81	7.0	12.0	30	45	7142	31	12.0	19.5	23	31	9153
80	7.0	12.0	30	45	7148	30	12.0	20.0	22	31	10100
79	7.0	12.0	30	44	7148	29	12.0	20.0	22	31	10102
78	7.0	12.0	30	44	7150	28	12.0	20.5	22	31	10106
77	7.0	12.0	29	43	7152	27	12.0	21.0	22	31	10110
76	7.0	12.0	29	43	7154	26	12.5	21.0	22	30	10114
75	7.5	12.5	29	43	7158	25	13.0	21.5	21	30	10117
74	7.5	12.5	29	43	8100	24	13.0	22.0	21	30	10120
73	8.0	13.0	29	42	8101	23	13.0	22.5	21	30	10128
72	8.0	13.0	29	42	8103	22	13.0	23.0	21	29	10130
71	8.0	13.0	29	41	8108	21	13.5	23.0	21	29	10132
70	8.0	13.0	28	41	8108	20	14.0	24.0	20	28	10135
69	8.0	13.0	28	41	8111	19	14.0	24.0	20	28	10138
68	8.0	13.0	28	41	8112	18	14.5	25.0	20	28	10142
67	8.0	13.5	28	40	8113	17	15.0	25.0	20	27	10147
66	8.0	13.5	28	40	8115	16	15.0	26.0	19	27	10154
65	8.0	13.5	28	40	8119	15	15.0	26.0	19	26	11101
64	8.0	14.0	27	40	8120	14	16.0	26.5	19	26	11109
63	8.5	14.0	27	40	8122	13	16.0	28.0	19	25	11115
62	8.5	14.0	27	40	8124	12	17.0	28.0	19	25	11132
61	8.5	14.0	27	39	8125	11	17.0	28.5	18	24	11142
60	9.0	14.0	27	39	8125	10	18.0	30.0	18	23	11148
59	9.0	14.0	27	39	8131	9	18.0	31.0	18	23	11158
58	9.0	14.5	27	38	8132	8	19.0	32.5	17	22	12107
57	9.0	14.5	26	38	8136	7	19.0	33.0	16	21	12121
56	9.0	15.0	26	38	8136	6	19.5	36.0	16	20	12130
55	9.0	15.0	26	38	8139	5	20.5	37.0	15	20	12158
54	9.0	15.0	26	37	8140	4	22.0	39.0	14	18	13119
53	9.0	15.0	26	37	8144	3	24.0	41.0	14	16	13148
52	9.0	15.0	26	37	8147	2	28.0	45.0	13	12	14114
51	9.0	15.0	26	37	8158	1	37.0	46.5	11	7	15132

GIRLS

AGE= 10

%TILE	TRICEP SKINFOLD N= (0882)	SUM OF SKINFOLDS (0834)	SIT & REACH (0882)	SIT-UPS (0848)	MILE RUN (0828)	%TILE	TRICEP SKINFOLD N= (0882)	SUM OF SKINFOLDS (0534)	SIT & REACH (0882)	SIT-UPS (0848)	MILE RUN (0828)
99	5.0	1..0	41	58	6:38	49	11.0	26.0	28	34	10:26
98	6.0	11.0	40	54	7:06	48	11.5	27.0	28	34	10:27
97	6.0	11.0	39	52	7:21	47	11.5	28.0	28	33	10:30
96	6.0	11.0	38	50	7:36	46	12.0	28.5	28	33	10:33
95	7.0	11.5	38	49	7:46	45	12.0	21.0	28	33	10:35
94	7.0	12.0	37	47	7:57	44	12.0	21.0	28	33	10:41
93	7.0	12.5	37	47	8:02	43	12.0	21.0	28	32	10:45
92	7.0	12.5	36	46	8:06	42	12.0	21.5	27	32	10:47
91	7.0	13.0	36	46	8:15	41	12.0	21.5	27	32	10:53
90	7.0	13.0	35	45	8:22	4(	12.0	22.0	27	32	10: 6
89	7.5	13.0	35	4(	8:24	39	12.5	22.0	27	31	11:00
88	8.0	13.5	35	45	8:30	38	13.0	22.0	27	31	11:03
87	8.0	14.0	35	44	8:32	37	13.0	22.5	26	31	11:08
86	8.0	14.0	34	43	8:34	36	13.0	23.0	26	31	11:13
85	8.0	14.0	34	43	8:39	35	13.0	23.0	26	30	11:16
84	8.0	14.0	34	42	8:41	34	13.0	23.0	26	30	11:19
83	8.0	14.0	34	42	8:43	33	13.5	23.5	26	30	11:22
82	8.0	14.0	34	42	8:48	32	14.0	24.0	26	30	11:28
81	8.0	14.5	33	42	8:50	31	14.0	24.0	26	30	11:31
80	8.5	15.0	33	41	8:53	30	14.0	24.0	25	29	11:33
79	8.5	15.0	33	41	8:58	29	14.0	24.5	25	29	11:36
78	9.0	15.0	33	41	9:02	28	14.0	25.0	25	29	11:40
77	9.0	15.0	33	40	9:05	27	14.5	25.0	25	28	11:43
76	9.0	15.0	33	40	9:08	26	15.0	26.0	25	28	11:47
75	9.0	15.5	32	40	9:11	25	15.0	26.0	25	28	11:51
74	9.0	15.5	32	40	9:13	24	15.0	26.5	24	28	11:55
73	9.0	16.0	32	40	9:15	23	15.0	27.0	24	27	12:00
72	9.0	16.0	32	39	9:19	22	16.0	27.0	24	27	12:06
71	9.0	16.0	32	39	9:21	21	16.0	28.0	24	27	12:11
70	9.0	16.5	32	39	9:23	20	16.5	28.0	23	26	12:14
69	9.5	16.5	32	38	9:28	19	16.5	28.5	23	25	12:19
68	9.5	16.5	31	38	9:30	18	16.5	29.0	23	25	12:25
67	10.0	17.0	31	38	9:34	17	17.0	30.0	23	25	12:29
66	10.0	17.0	31	38	9:36	16	17.0	30.5	23	24	12:32
65	10.0	17.0	31	37	9:39	15	17.0	31.0	23	24	12:38
64	10.0	17.0	31	37	9:42	14	18.0	32.0	22	24	12:45
63	10.0	17.0	31	37	9:45	13	18.0	32.0	22	23	12:56
62	10.0	17.0	30	37	9:50	12	18.5	34.0	22	23	13:00
61	10.0	17.0	30	36	9:52	11	19.0	35.0	21	22	13:05
60	10.0	17.5	30	36	9:55	10	19.0	36.0	21	22	13:22
59	10.0	18.0	30	36	9:59	9	20.0	37.5	20	21	13:34
58	10.0	18.0	30	36	10:02	8	21.0	38.0	20	20	13:48
57	10.5	18.0	30	36	10:06	7	21.0	39.0	19	20	13:59
56	10.5	18.0	29	35	10:09	6	22.0	40.0	19	19	14:08
55	11.0	18.5	29	35	10:10	5	23.0	42.0	18	18	14:20
54	11.0	19.0	29	35	10:14	4	24.0	46.0	18	17	14:42
53	11.0	19.0	29	35	10:17	3	24.0	46.0	17	14	15:09
52	11.0	19.0	29	34	10:18	2	25.0	52.0	16	12	15:27
51	11.0	19.0	29	34	10:20	1	29.0	56.0	14	9	16:32
50	11.0	19.5	29	34	10:24						

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS — AGE=11

% TILE	TRICEP SKINFOLD (0925)	SUM OF SKINFOLDS (0618)	SIT & REACH (0934)	SIT-UPS (0859)	MILE RUN (0852)	% TILE	TRICEP SKINFOLD (0925)	SUM OF SKINFOLDS (0618)	SIT & REACH (0934)	SIT-UPS (0859)	MILE RUN (0852)
	N=						N=				
99	4.0	8.0	39	62	6:27	49	10.0	16.0	25	39	8:35
98	5.0	8.5	38	58	6:43	48	10.0	16.0	25	39	8:37
97	5.0	9.0	36	55	6:51	47	10.0	16.5	25	38	8:39
96	5.0	9.5	36	54	6:54	46	10.0	17.0	25	38	8:40
95	5.0	10.0	35	53	6:57	45	10.0	17.0	25	38	8:42
94	5.0	10.0	35	52	7:01	44	10.5	17.0	24	38	8:43
93	5.5	10.0	34	51	7:03	43	10.5	17.0	24	37	8:45
92	6.0	10.5	34	51	7:05	42	11.0	17.5	24	37	8:49
91	6.0	10.5	34	51	7:11	41	11.0	17.5	24	37	8:53
90	6.0	11.0	33	50	7:12	40	11.0	18.0	24	37	8:56
89	6.0	11.0	33	50	7:14	39	11.0	18.0	24	36	8:58
88	6.0	11.0	33	49	7:18	38	11.0	18.0	23	36	9:00
87	6.0	11.0	32	45	7:20	37	11.0	18.5	23	36	9:02
86	6.5	11.5	32	48	7:22	36	11.0	19.0	23	35	9:04
85	6.5	11.5	32	48	7:24	35	11.5	19.0	23	35	9:07
84	6.5	11.5	31	48	7:28	34	12.0	19.0	23	35	9:09
83	7.0	12.0	31	47	7:28	33	12.0	19.0	23	35	9:15
82	7.0	12.0	31	47	7:30	32	12.0	20.0	23	34	9:20
81	7.0	12.0	31	47	7:32	31	12.0	20.0	23	34	9:23
80	7.0	12.0	31	46	7:34	30	12.0	20.0	22	34	9:25
79	7.0	12.0	31	46	7:36	29	12.0	20.5	22	33	9:30
78	7.0	12.0	30	46	7:38	28	12.0	21.0	22	33	9:34
77	7.0	12.0	30	45	7:41	27	13.0	21.0	21	33	9:36
76	7.0	12.5	30	45	7:43	26	13.0	22.0	21	33	9:40
75	7.0	12.5	30	45	7:45	25	13.0	22.0	21	32	9:45
74	7.5	13.0	29	45	7:47	24	13.0	23.0	21	32	9:54
73	7.5	13.0	29	44	7:48	23	13.5	23.0	21	32	9:59
72	8.0	13.0	29	44	7:50	22	14.0	24.0	20	31	10:03
71	8.0	13.0	29	44	7:51	21	14.0	24.0	20	31	10:08
70	8.0	13.0	29	43	7:52	20	14.0	25.0	20	31	10:10
69	8.0	13.0	29	43	7:54	19	14.0	25.5	20	30	10:16
68	8.0	13.5	28	43	7:55	18	15.0	26.0	19	30	10:20
67	8.0	14.0	28	43	7:57	17	15.0	26.5	19	30	10:25
66	8.0	14.0	28	43	8:00	16	15.0	27.0	19	30	10:31
65	8.0	14.0	28	42	8:02	15	15.0	27.0	18	30	10:36
64	8.5	14.0	28	42	8:04	14	16.0	28.0	18	29	10:45
63	9.0	14.0	28	42	8:07	13	16.0	29.0	18	29	10:56
62	9.0	14.0	27	42	8:09	12	16.5	29.5	18	28	11:04
61	9.0	14.5	27	42	8:10	11	17.0	30.0	17	27	11:11
60	9.0	15.0	27	41	8:12	10	18.0	31.0	17	26	11:23
59	9.0	15.0	27	41	8:15	9	18.0	32.0	17	25	11:35
58	9.0	15.0	27	41	8:17	8	18.0	32.5	16	25	11:43
57	9.0	15.0	27	41	8:18	7	19.0	34.0	16	24	11:57
56	9.0	15.0	26	40	8:20	6	20.0	36.0	15	23	12:19
55	9.0	15.0	26	40	8:22	5	21.0	37.0	14	21	12:42
54	9.0	15.5	26	40	8:24	4	22.0	39.0	14	20	12:58
53	9.5	16.0	26	40	8:26	3	22.5	41.0	13	17	13:26
52	10.0	16.0	26	40	8:28	2	26.0	45.5	12	15	14:01
51	10.0	16.0	26	39	8:31	1	28.5	50.0	10	7	15:31

GIRLS

AGE=11

% TILE	TRICEP SKINFOLD mm (0901)	SUM OF SKINFOLDS (0870)	SIT & REACH (0904)	SIT-UPS (0880)	MILE RUN (0829)	% TILE	TRICEP SKINFOLD mm (0901)	SUM OF SKINFOLDS (0870)	SIT & REACH (0904)	SIT-UPS (0880)	MILE RUN (0829)
99	5.0	10.0	43	62	7:27	49	11.5	19.5	29	35	10:06
98	6.0	11.0	42	58	7:31	48	12.0	20.0	29	35	10:10
97	6.0	11.0	40	56	7:46	47	12.0	20.0	29	35	10:11
96	6.0	12.0	39	55	7:50	46	12.0	20.0	29	34	10:14
95	6.5	12.0	39	53	7:59	45	12.0	20.0	29	34	10:19
94	7.0	12.0	39	52	8:04	44	12.0	20.5	29	34	10:22
93	7.0	13.0	38	50	8:07	43	12.0	20.5	28	34	10:25
92	7.0	13.0	38	50	8:10	42	12.0	21.0	28	33	10:27
91	7.0	13.0	37	49	8:12	41	12.0	21.0	28	33	10:30
90	7.5	13.5	37	48	8:16	40	12.0	21.5	28	33	10:32
89	7.5	13.5	36	47	8:19	39	12.5	22.0	28	33	10:34
88	8.0	14.0	36	46	8:23	38	13.0	22.0	28	33	10:37
87	8.0	14.0	36	46	8:27	37	13.0	22.0	27	32	10:45
86	8.0	14.0	36	45	8:30	36	13.0	22.5	27	32	10:46
85	8.0	14.0	35	45	8:32	35	13.0	22.5	27	32	10:50
84	8.0	14.5	35	45	8:35	34	13.0	23.0	27	32	10:52
83	8.0	14.5	35	44	8:37	33	13.5	23.0	27	32	10:55
82	8.0	15.0	35	44	8:41	32	14.0	23.0	27	31	10:58
81	8.5	15.0	35	44	8:44	31	14.0	23.5	27	31	11:00
80	8.5	15.0	34	43	8:46	30	14.0	24.0	26	31	11:02
79	9.0	15.0	34	43	8:49	29	14.0	24.0	26	31	11:05
78	9.0	15.0	34	42	8:54	28	14.0	24.5	26	30	11:09
77	9.0	15.0	34	42	8:56	27	14.0	25.0	26	30	11:13
76	9.0	15.5	34	42	9:00	26	14.0	25.0	25	30	11:15
75	9.0	16.0	33	42	9:02	25	15.0	25.0	25	30	11:20
74	9.0	16.0	33	41	9:07	24	15.0	26.0	25	30	11:24
73	9.0	16.0	33	41	9:10	23	15.0	26.5	25	30	11:29
72	9.0	16.0	33	40	9:12	22	15.0	27.0	25	29	11:32
71	9.0	16.0	33	40	9:14	21	15.0	27.0	25	29	11:33
70	9.5	16.0	33	40	9:18	20	15.0	27.5	24	28	11:38
69	10.0	16.5	32	40	9:20	19	16.0	28.0	24	28	11:45
68	10.0	16.5	32	40	9:23	18	16.0	28.5	24	27	11:50
67	10.0	17.0	32	39	9:26	17	16.0	29.0	24	27	11:53
66	10.0	17.0	32	39	9:30	16	16.0	29.0	24	27	11:57
65	10.0	17.0	32	39	9:30	15	16.5	30.0	23	26	12:00
64	10.0	17.0	32	38	9:33	14	17.0	31.0	23	26	12:05
63	10.0	17.5	32	38	9:34	13	17.0	32.0	23	25	12:10
62	10.0	17.5	31	38	9:35	12	17.0	33.0	22	25	12:18
61	10.0	18.0	31	38	9:36	11	18.0	33.0	22	24	12:27
60	10.0	18.0	31	38	9:41	10	18.0	34.0	21	24	12:37
59	10.5	18.0	31	37	9:43	9	19.0	35.0	21	24	12:46
58	11.0	18.0	31	37	9:45	8	20.0	36.0	21	22	12:50
57	11.0	18.0	30	37	9:47	7	20.0	38.0	20	22	13:03
56	11.0	18.5	30	37	9:50	6	21.0	40.0	20	21	13:20
55	11.0	18.5	30	36	9:52	5	22.0	42.0	19	20	13:35
54	11.0	19.0	30	36	9:54	4	22.0	45.0	19	19	14:06
53	11.0	19.0	30	36	9:56	3	23.5	47.5	18	17	14:52
52	11.0	19.0	30	36	9:58	2	25.0	49.5	16	15	15:00
51	11.0	19.0	30	35	10:00	1	26.5	56.5	13	10	15:46
50	11.0	19.5	29	35	10:02						

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS AGE=12

% TILE	TRICEP SKINFOLD N= (1189)	SUM OF SKINFOLDS (0745)	SIT & REACH (1192)	SIT-UPS (1179)	MILE RUN (1120)	% TILE	TRICEP SKINFOLD N= (1189)	SUM OF SKINFOLDS (0745)	SIT & REACH (1192)	SIT-UPS (1179)	MILE RUN (1120)
99	4.0	9.0	40	68	6:04	49	10.0	17.0	26	42	8:17
98	5.0	9.5	39	64	6:21	48	10.0	17.0	26	42	8:20
97	5.0	10.0	38	62	6:28	47	10.5	17.5	26	42	8:20
96	5.0	10.0	37	60	6:32	46	11.0	17.5	25	42	8:23
95	5.5	10.5	36	58	6:37	45	11.0	18.0	25	41	8:25
94	6.0	11.0	36	57	6:41	44	11.0	18.0	25	41	8:28
93	6.0	11.0	35	57	6:45	43	11.0	18.0	25	41	8:29
92	6.0	11.0	35	56	6:47	42	11.0	18.0	25	41	8:32
91	6.0	11.0	34	55	6:50	41	11.0	18.5	25	40	8:34
90	6.0	11.5	34	55	6:52	40	11.0	19.0	24	40	8:37
89	6.0	11.5	34	54	6:55	39	11.0	19.5	24	40	8:39
88	6.5	12.0	33	54	6:55	38	11.5	19.0	24	40	8:42
87	7.0	12.0	33	53	7:01	37	12.0	19.0	24	40	8:45
86	7.0	12.0	33	53	7:03	36	12.0	19.0	24	40	8:47
85	7.0	12.0	33	52	7:05	35	12.0	19.5	24	39	8:50
84	7.0	12.0	32	52	7:08	34	12.0	20.0	23	39	8:52
83	7.0	12.0	32	52	7:10	33	12.0	20.0	23	39	8:55
82	7.0	12.5	32	51	7:11	32	12.0	20.5	23	39	8:58
81	7.0	13.0	31	51	7:12	31	13.0	21.0	23	38	9:00
80	7.0	13.0	31	50	7:15	30	13.0	21.0	23	38	9:03
79	7.0	13.0	31	50	7:17	29	13.0	22.0	22	38	9:05
78	7.5	13.0	31	50	7:19	28	13.0	22.0	22	37	9:08
77	8.0	13.0	31	49	7:20	27	14.0	22.0	22	37	9:13
76	8.0	13.0	31	49	7:23	26	14.0	22.0	22	36	9:16
75	8.0	13.0	30	48	7:25	25	14.0	22.5	22	36	9:20
74	8.0	13.5	30	48	7:27	24	14.0	23.0	21	36	9:25
73	8.0	14.0	30	48	7:29	23	14.5	23.0	21	35	9:27
72	8.0	14.0	30	48	7:30	22	15.0	24.0	21	35	9:32
71	8.0	14.0	30	47	7:31	21	15.0	25.0	21	35	9:39
70	8.0	14.0	29	47	7:33	20	15.0	25.0	21	34	9:45
69	8.0	14.0	29	47	7:34	19	15.0	25.0	20	33	9:48
68	8.5	14.0	29	47	7:35	18	16.0	26.0	20	33	9:55
67	9.0	14.0	29	46	7:38	17	16.0	27.0	20	32	9:58
66	9.0	14.5	29	46	7:39	16	16.0	28.0	20	32	10:05
65	9.0	15.0	29	46	7:41	15	17.0	28.0	19	32	10:13
64	9.0	15.0	28	46	7:43	14	17.0	29.0	19	31	10:19
63	9.0	15.0	28	45	7:44	13	17.0	30.0	19	31	10:23
62	9.0	15.0	28	45	7:45	12	18.0	31.0	19	30	10:29
61	9.0	15.0	28	45	7:47	11	18.0	31.5	18	30	10:37
60	9.0	15.5	28	45	7:50	10	19.0	32.0	17	30	10:43
59	9.5	15.5	28	44	7:52	9	19.0	33.5	17	29	10:51
58	9.5	16.0	28	44	7:54	8	20.0	35.0	16	28	11:00
57	10.0	16.0	27	44	7:56	7	20.0	36.0	16	28	11:07
56	10.0	16.0	27	44	8:00	6	21.0	36.0	15	27	11:23
55	10.0	16.0	27	43	8:03	5	21.0	38.5	15	25	11:35
54	10.0	16.5	27	43	8:05	4	22.0	40.0	14	25	11:47
53	10.0	16.5	27	43	8:07	3	23.0	42.5	13	24	12:25
52	10.0	17.0	26	43	8:10	2	25.0	46.0	12	21	13:24
51	10.0	17.0	26	42	8:13	1	27.0	55.0	10	15	14:44

GIRLS

AGE=12

% TILE	TRICEP SKINFOLD N= (1253)	SUM OF SKINFOLDS (0773)	SIT & REACH (1251)	SIT-UPS (1224)	MILE RUN (1190)	% TILE	TRICEP SKINFOLD N= (1253)	SUM OF SKINFOLDS (0773)	SIT & REACH (1251)	SIT-UPS (1224)	MILE RUN (1190)
99	5.0	11.0	45	60	6:54	49	12.0	21.0	32	39	9:2
98	6.0	11.0	44	57	7:06	48	12.0	21.0	32	38	9:30
97	6.0	12.0	43	55	7:14	47	12.0	21.5	32	38	9:32
96	7.0	12.0	42	54	7:18	46	12.0	22.0	32	38	9:36
95	7.0	12.5	41	53	7:24	45	12.0	22.0	32	38	9:38
94	7.0	13.0	41	52	7:25	44	12.5	22.0	31	37	9:43
93	7.0	13.0	41	52	7:35	43	13.0	22.5	31	37	9:46
92	7.0	13.0	40	51	7:35	42	13.0	23.0	31	37	9:49
91	7.5	13.0	40	51	7:41	41	13.0	23.0	31	37	9:54
90	7.5	13.5	39	50	7:45	40	13.0	23.0	31	36	9:57
89	8.0	14.0	39	50	7:50	39	13.0	23.0	31	36	10:01
88	8.0	14.0	39	49	7:51	38	13.5	23.5	30	36	10:05
87	8.0	14.0	39	49	7:55	37	14.0	24.0	30	36	10:07
86	8.0	14.0	38	48	7:58	36	14.0	24.0	30	35	10:12
85	8.0	14.0	38	48	8:00	35	14.0	24.0	30	35	10:15
84	8.0	14.5	38	48	8:03	34	14.0	25.0	30	35	10:17
83	8.0	15.0	38	47	8:07	33	14.0	25.0	30	35	10:19
82	8.5	15.0	37	47	8:10	32	14.0	25.0	29	34	10:21
81	9.0	15.0	37	46	8:13	31	14.0	26.0	29	34	10:25
80	9.0	15.0	37	46	8:18	30	15.0	26.0	29	34	10:28
79	9.0	15.0	37	46	8:21	29	15.0	26.0	29	34	10:30
78	9.0	15.5	37	46	8:23	28	15.0	26.5	29	34	10:36
77	9.0	16.0	36	45	8:25	27	15.0	27.0	28	33	10:40
76	9.0	16.0	36	45	8:27	26	15.0	27.0	28	33	10:43
75	9.0	16.0	36	45	8:30	25	15.0	27.5	28	32	10:49
74	9.0	16.0	36	45	8:31	24	15.0	28.0	28	32	10:53
73	9.5	16.5	36	45	8:33	23	16.0	28.0	28	32	10:56
72	10.0	16.5	36	44	8:35	22	16.0	29.0	27	32	11:02
71	10.0	16.5	35	44	8:38	21	16.0	30.0	27	31	11:07
70	10.0	17.0	35	44	8:40	20	16.0	30.0	27	31	11:09
69	10.0	17.0	35	43	8:42	19	16.5	30.5	27	31	11:12
68	10.0	17.0	35	43	8:45	18	17.0	31.0	26	31	11:17
67	10.0	17.0	35	43	8:49	17	17.0	31.0	26	30	11:23
66	10.0	17.5	34	42	8:51	16	17.0	32.0	26	30	11:27
65	10.0	17.5	34	42	8:55	15	17.5	32.5	25	30	11:31
64	10.0	18.0	34	42	8:56	14	18.0	33.0	25	30	11:39
63	10.5	18.0	34	42	8:59	13	18.0	33.0	25	30	11:45
62	11.0	18.5	34	41	9:00	12	18.5	34.0	24	29	11:52
61	11.0	18.5	34	41	9:02	11	19.0	35.0	24	28	12:00
60	11.0	19.0	34	41	9:03	10	19.0	35.0	23	28	12:11
59	11.0	19.0	33	41	9:06	9	20.0	36.0	23	27	12:26
58	11.0	19.0	33	40	9:09	8	20.5	36.0	23	26	12:34
57	11.0	19.5	33	40	9:10	7	21.5	38.5	22	25	13:02
56	11.0	19.5	33	40	9:12	6	22.0	40.0	21	24	13:17
55	11.0	20.0	33	40	9:14	5	23.0	41.0	20	23	13:37
54	11.0	20.0	33	40	9:16	4	24.0	43.5	19	22	14:00
53	11.5	20.0	33	40	9:18	3	25.0	45.5	18	21	14:43
52	11.5	20.0	32	40	9:20	2	26.0	50.0	16	18	15:06
51	12.0	20.5	32	40	9:22	1	29.0	58.0	13	11	16:02
50	12.0	21.0	32	39	9:25						

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS AGE=13

% TILE	TRICEP SKINFOLD N= (1326)	SUM OF SKINFOLDS (0803)	SIT & REACH (1338)	SIT-UPS (1337)	1 MILE RUN (1094)	1.5 MILE RUN (0126)	% TILE	TRICEP SKINFOLD N= (1326)	SUM OF SKINFOLDS (0803)	SIT & REACH (1338)	SIT-UPS (1337)	1 MILE RUN (1094)	1.5 MILE RUN (0126)
99	4.0	8.5	48	70	5:49	9:04	49	16.0	17.0	27	48	7:38	13:01
98	4.5	9.5	44	67	6:02	9:27	48	16.0	17.0	27	48	7:40	13:11
97	5.0	10.0	42	65	6:07	9:30	47	16.0	17.5	27	48	7:41	13:17
96	5.0	10.0	40	63	6:10	9:46	46	16.0	17.5	26	48	7:43	13:32
95	5.0	10.0	39	62	6:17	9:58	45	16.5	17.5	26	48	7:45	13:36
94	5.0	10.5	38	61	6:20	10:04	44	11.0	18.0	26	46	7:47	13:40
93	5.5	11.0	38	60	6:22	10:08	43	11.0	18.0	26	44	7:49	13:45
92	6.0	11.0	37	60	6:24	10:08	42	11.0	18.0	25	44	7:51	13:54
91	6.0	11.0	36	60	6:25	10:17	41	11.0	18.5	25	44	7:55	14:00
90	6.0	11.0	36	59	6:29	10:33	40	11.0	19.0	25	44	7:57	14:03
89	6.0	11.5	35	58	6:30	10:35	39	11.0	19.0	25	43	8:00	14:03
88	6.0	12.0	35	58	6:32	10:37	38	11.0	19.0	25	43	8:01	14:06
87	6.0	12.0	34	57	6:33	10:41	37	12.0	20.0	25	43	8:03	14:19
86	6.5	12.0	34	56	6:36	10:45	36	12.0	20.0	25	42	8:05	14:23
85	7.0	12.0	34	56	6:37	10:47	35	12.0	20.0	25	42	8:06	14:31
84	7.0	12.0	33	55	6:39	10:47	34	12.0	20.0	24	42	8:10	14:40
83	7.0	12.0	33	55	6:41	11:03	33	12.0	21.0	24	42	8:12	14:50
82	7.0	12.5	33	55	6:43	11:08	32	12.0	21.0	24	41	8:16	14:55
81	7.0	13.0	33	55	6:45	11:13	31	13.0	21.5	24	41	8:19	15:08
80	7.0	13.0	32	54	6:47	11:13	30	13.0	22.0	24	41	8:23	15:12
79	7.0	13.0	32	54	6:49	11:15	29	13.0	22.0	23	41	8:26	15:14
78	7.0	13.0	32	53	6:50	11:18	28	13.0	23.0	23	40	8:30	15:18
77	7.0	13.5	32	53	6:52	11:19	27	14.0	23.0	23	40	8:33	15:26
76	7.0	13.5	32	53	6:54	11:20	26	14.0	23.5	23	40	8:37	15:29
75	7.0	13.5	32	52	6:56	11:21	25	14.0	24.0	22	40	8:40	15:32
74	7.5	14.0	31	52	6:56	11:27	24	14.0	24.0	22	40	8:43	15:46
73	7.5	14.0	31	52	6:58	11:31	23	14.0	25.0	22	40	8:46	15:48
72	8.0	14.0	31	52	7:00	11:38	22	15.0	25.0	22	40	8:51	15:51
71	8.0	14.0	31	51	7:01	11:48	21	15.0	26.0	22	39	8:55	15:58
70	8.0	14.0	30	51	7:03	11:50	20	15.0	26.5	21	39	8:59	16:03
69	8.0	14.0	30	51	7:05	11:51	19	15.0	27.0	21	38	9:00	16:11
68	8.0	14.5	30	51	7:06	11:55	18	16.0	27.5	21	38	9:04	16:32
67	8.0	14.5	30	50	7:07	11:59	17	16.0	28.0	20	37	9:10	16:44
66	8.0	15.0	30	50	7:08	12:05	16	16.0	28.5	20	37	9:14	17:11
65	8.0	15.0	30	50	7:10	12:07	15	17.0	30.0	20	36	9:18	17:31
64	8.0	15.0	29	50	7:12	12:12	14	17.0	31.0	20	36	9:24	17:31
63	8.5	15.0	29	50	7:13	12:17	13	17.5	32.0	20	35	9:28	17:37
62	8.5	15.0	29	49	7:15	12:18	12	18.0	33.0	19	35	9:35	17:40
61	9.0	15.0	29	49	7:16	12:19	11	18.0	33.5	19	34	9:43	17:44
60	9.0	15.5	29	49	7:19	12:22	10	19.0	34.0	19	33	9:52	18:10
59	9.0	15.5	29	48	7:20	12:23	9	20.0	35.0	18	32	10:05	18:13
58	9.0	16.0	28	48	7:22	12:26	8	20.0	36.0	17	32	10:23	18:24
57	9.0	16.0	28	48	7:24	12:28	7	21.0	36.5	17	31	10:34	19:19
56	9.0	16.0	28	48	7:25	12:30	6	22.0	40.0	16	30	10:54	20:00
55	9.0	16.0	28	47	7:27	12:32	5	22.0	42.0	15	30	11:15	20:06
54	9.5	16.0	28	47	7:29	12:32	4	23.0	45.0	14	29	11:44	20:06
53	10.0	16.5	28	47	7:30	12:38	3	25.0	48.0	13	28	12:13	20:08
52	10.0	16.5	27	46	7:32	12:49	2	26.5	52.0	12	24	13:10	21:33
51	10.0	17.0	27	46	7:34	12:55	1	29.0	60.0	10	20	14:48	26:33
50	10.0	17.0	27	46	7:36	12:57							

GIRLS

AGE=13

% TILE	TRICEP SKINFOLD N= (1365)	SUM OF SKINFOLDS (0873)	SIT & REACH (1335)	SIT-UPS (1343)	1 MILE RUN (1038)	1.5 MILE RUN (0182)	% TILE	TRICEP SKINFOLD N= (1365)	SUM OF SKINFOLDS (0873)	SIT & REACH (1335)	SIT-UPS (1343)	1 MILE RUN (1038)	1.5 MILE RUN (0182)
99	5.0	11.5	47	62	6:30	11:19	49	12.5	24.0	34	40	9:10	16:25
98	6.0	12.0	46	58	6:43	11:28	48	14.0	24.0	34	40	9:13	16:30
97	7.0	12.0	45	56	6:50	11:36	47	14.0	24.5	34	40	9:18	16:32
96	7.0	13.0	44	55	6:55	11:58	46	14.0	25.0	34	40	9:20	16:42
95	7.0	13.0	43	55	7:02	12:01	45	14.0	25.0	33	40	9:24	16:44
94	7.0	13.5	43	53	7:08	12:08	44	14.0	25.0	33	40	9:26	16:48
93	7.5	14.0	43	53	7:14	12:11	43	14.5	25.5	33	40	9:28	16:53
92	8.0	14.0	42	52	7:17	12:16	42	15.0	26.0	33	39	9:30	17:00
91	8.0	14.5	42	52	7:19	12:41	41	15.0	26.0	33	39	9:32	17:01
90	8.0	15.0	42	52	7:21	12:53	40	15.0	26.0	33	39	9:35	17:06
89	8.0	15.0	41	51	7:23	13:05	39	15.0	27.0	32	38	9:36	17:16
88	8.0	15.0	41	51	7:26	13:08	38	15.0	27.0	32	38	9:36	17:21
87	8.5	15.5	41	50	7:33	13:09	37	15.5	27.0	32	38	9:41	17:27
86	9.0	16.0	40	50	7:38	13:21	36	16.0	28.0	32	38	9:45	17:32
85	9.0	16.0	40	50	7:42	13:26	35	16.0	28.0	32	37	9:50	17:36
84	9.0	16.0	40	49	7:48	13:32	34	16.0	28.0	31	37	9:53	17:39
83	9.0	16.0	39	49	7:51	13:35	33	16.0	28.5	31	37	9:57	17:48
82	9.0	17.0	39	49	7:53	13:36	32	16.0	29.0	31	36	9:59	17:50
81	9.0	17.0	39	48	7:56	13:39	31	16.5	29.5	31	36	10:00	17:54
80	9.0	17.0	39	48	7:59	13:46	30	17.0	30.0	31	36	10:04	18:00
79	10.0	17.0	38	47	8:02	13:55	29	17.0	30.0	31	35	10:08	18:07
78	10.0	17.5	38	47	8:05	13:56	28	17.0	30.0	30	35	10:11	18:12
77	10.0	17.5	38	47	8:06	13:57	27	17.0	31.0	30	35	10:14	18:18
76	10.0	18.0	38	46	8:08	14:07	26	17.0	31.0	30	35	10:17	18:18
75	10.0	18.0	38	46	8:09	14:09	25	18.0	32.0	30	35	10:21	18:23
74	10.0	18.0	38	46	8:13	14:10	24	18.0	32.0	30	35	10:23	18:28
73	10.0	18.5	37	46	8:15	14:21	23	18.0	33.0	29	34	10:28	18:36
72	11.0	19.0	37	45	8:17	14:22	22	18.5	33.5	29	34	10:31	18:50
71	11.0	19.0	37	45	8:19	14:24	21	19.0	34.0	29	34	10:34	18:52
70	11.0	19.0	37	45	8:22	14:28	20	19.0	34.0	29	33	10:39	18:55
69	11.0	19.0	37	45	8:24	14:40	19	19.0	35.0	28	33	10:45	19:06
68	11.0	19.5	37	45	8:27	14:46	18	20.0	35.5	28	33	10:51	19:27
67	11.0	20.0	36	44	8:29	14:51	17	20.0	36.5	28	32	10:58	19:28
66	11.5	20.0	36	44	8:32	15:03	16	20.0	37.0	27	32	11:01	19:35
65	11.5	20.0	36	44	8:36	15:09	15	21.0	38.0	27	32	11:07	19:38
64	12.0	20.0	36	43	8:38	15:17	14	21.0	38.0	27	31	11:15	19:48
63	12.0	20.5	36	43	8:42	15:19	13	21.5	39.0	26	31	11:24	20:34
62	12.0	21.0	36	43	8:44	15:21	12	23.0	40.0	26	30	11:32	20:50
61	12.0	21.0	36	43	8:47	15:30	11	22.0	41.0	26	30	11:36	20:56
60	12.0	21.0	35	43	8:48	15:31	10	23.5	41.0	25	30	11:48	20:58
59	12.0	21.5	35	42	8:50	15:41	9	23.0	42.0	25	29	11:58	21:26
58	12.0	22.0	35	42	8:52	15:44	8	22.5	42.5	24	29	12:13	21:28
57	12.0	22.0	35	42	8:55	15:46	7	24.0	44.0	24	28	12:28	21:40
56	13.0	22.0	35	42	8:58	15:49	6	25.0	45.0	23	27	12:59	21:56
55	13.0	22.5	35	42	9:00	16:00	5	26.0	46.5	22	26	13:23	22:14
54	13.0	23.0	35	42	9:01	16:04	4	27.0	49.0	21	25	13:54	22:34
53	13.0	23.0	34	41	9:03	16:09	3	27.5	51.0	20	24	14:07	22:50
52	13.0	23.0	34	41	9:04	16:13	2	29.0	54.0	18	22	15:00	23:04
51	13.0	23.0	34	41	9:06	16:15	1	31.5	61.0	16	20	18:36	25:12
50	13.0	23.5	34	41	9:08	16:21							

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS AGE=14

% TILE	TRICEP SKINFOLD N= (1420)	SUM OF SKINFOLDS (0963)	SIT & REACH (1450)	SIT-UPS (1464)	1 MILE RUN (0714)	1.5 MILE RUN (0380)	% TILE	TRICEP SKINFOLD N= (1420)	SUM OF SKINFOLDS (0963)	SIT & REACH (1450)	SIT-UPS (1464)	1 MILE RUN (0714)	1.5 MILE RUN (0380)
99	3.0	7.0	55	71	5:36	8:54	49	9.0	17.0	30	48	7:13	13:46
98	3.5	8.0	55	67	5:42	8:58	48	10.0	18.0	29	47	7:14	13:53
97	4.0	9.0	53	65	5:46	9:31	47	10.0	18.0	29	47	7:17	13:59
96	4.0	9.0	50	64	5:50	9:40	46	10.0	18.0	29	47	7:19	13:CC
95	4.0	10.0	50	63	5:55	9:46	45	10.0	18.0	29	46	7:20	13:07
94	5.0	10.0	48	62	5:57	9:57	44	10.0	18.0	28	46	7:22	13:10
93	5.0	10.0	48	61	5:59	10:02	43	10.0	19.0	28	46	7:23	13:12
92	5.0	10.5	45	60	6:01	10:07	42	10.0	19.0	28	45	7:26	13:15
91	5.0	11.0	45	60	6:04	10:10	41	10.0	19.0	28	45	7:2[illegible]	13:17
90	5.0	11.0	43	60	6:07	10:11	40	10.0	19.0	28	45	7:30	13:23
89	5.0	11.0	43	59	6:10	10:14	39	10.5	19.5	27	45	7:30	13:27
88	5.5	11.5	43	58	6:11	10:21	38	11.0	20.0	27	45	7:32	13:33
87	6.0	12.0	41	58	6:14	10:24	37	11.0	20.0	27	44	7:34	13:36
86	6.0	12.0	40	57	6:18	10:27	36	11.0	20.0	27	44	7:36	13:39
85	6.0	12.0	40	57	6:19	10:30	35	11.0	21.0	27	44	7:37	13:45
84	6.0	12.0	40	56	6:20	10:32	34	11.0	21.0	26	43	7:39	13:46
83	6.0	12.0	39	56	6:22	10:35	33	11.0	21.0	26	43	7:40	13:50
82	6.0	12.5	38	55	6:24	10:37	32	12.0	21.0	26	42	7:42	14:07
81	6.0	12.5	38	55	6:25	10:39	31	12.0	22.0	26	42	7:44	14:10
80	6.0	13.0	37	55	6:27	10:42	30	12.0	22.0	26	42	7:47	14:20
79	6.0	13.0	37	54	6:29	10:49	29	12.0	22.0	25	42	7:49	14:23
78	6.5	13.0	37	54	6:30	10:52	28	12.0	23.0	25	42	7:52	14:34
77	7.0	13.0	36	54	6:32	10:55	27	13.0	23.0	25	41	7:54	14:44
76	7.0	13.0	36	54	6:33	11:01	26	13.0	23.0	25	41	7:56	14:47
75	7.0	13.5	36	53	6:34	11:04	25	13.0	24.0	25	41	8:00	15:00
74	7.0	14.0	35	53	6:35	11:05	24	13.0	24.0	24	40	8:05	15:CC
73	7.0	14.0	35	53	6:38	11:10	23	14.0	24.0	24	40	8:10	15:06
72	7.0	14.0	34	52	6:40	11:15	22	14.0	24.5	24	40	8:12	15:23
71	7.0	14.0	34	52	6:41	11:19	21	14.0	25.0	24	40	8:17	15:36
70	7.0	14.0	34	52	6:43	11:26	20	14.0	25.0	23	40	8:21	15:41
69	7.0	14.0	34	52	6:44	11:30	19	14.5	26.0	23	40	8:26	15:53
68	7.0	14.0	33	52	6:45	11:32	18	15.0	27.0	23	39	8:31	15:56
67	7.0	14.0	33	51	6:47	11:34	17	15.0	28.0	22	39	8:34	16:31
66	7.5	14.5	33	51	6:48	11:35	16	15.0	28.0	22	38	8:40	16:42
65	8.0	15.0	32	51	6:49	11:39	15	16.0	29.0	22	38	8:46	16:53
64	8.0	15.0	32	50	6:51	11:43	14	16.0	30.0	21	37	8:49	17:11
63	8.0	15.0	32	50	6:53	11:44	13	17.0	30.0	21	37	8:57	18:00
62	8.0	15.0	32	50	6:54	11:54	12	17.0	31.0	20	36	9:02	18:21
61	8.0	15.0	32	50	6:55	11:56	11	18.0	31.0	20	36	9:11	18:46
60	8.0	15.0	31	50	6:57	12:00	10	18.0	32.0	19	35	9:20	19:18
59	8.0	15.5	31	50	6:59	12:05	9	19.0	34.0	19	35	9:30	20:00
58	8.0	16.0	31	50	7:00	12:07	8	20.0	34.0	18	35	9:41	20:CC
57	9.0	16.0	31	50	7:01	12:12	7	20.0	36.0	18	34	9:54	20:20
56	9.0	16.0	31	49	7:03	12:15	6	21.0	37.0	17	33	10:27	20:50
55	9.0	16.0	30	49	7:04	12:18	5	21.0	40.0	16	32	10:40	20:00
54	9.0	16.0	30	49	7:05	12:24	4	23.0	43.0	15	30	11:08	20:00
53	9.0	16.5	30	49	7:07	12:30	3	24.0	46.0	14	20	11:30	20:00
52	9.0	17.0	30	48	7:09	12:37	2	28.0	51.0	13	26	12:38	20:00
51	9.0	17.0	30	48	7:10	12:41	1	29.0	58.0	10	21	13:34	20:57
50	9.0	17.0	30	48	7:11	12:46							

GIRLS

AGE=14

% TILE	TRICEP SKINFOLD N= (1557)	SUM OF SKINFOLDS (1113)	SIT & REACH (1557)	SIT-UPS (1564)	1 MILE RUN (0662)	1.5 MILE RUN (0484)	% TILE	TRICEP SKINFOLD N= (1557)	SUM OF SKINFOLDS (1113)	SIT & REACH (1557)	SIT-UPS (1564)	1 MILE RUN (0662)	1.5 MILE RUN (0484)
99	4.5	12.0	48	63	6122	10158	49	14.0	26.0	35	40	9106	16130
98	6.0	13.0	46	60	6137	11116	48	14.8	26.0	35	40	9110	16132
97	7.0	14.0	46	59	6152	11125	47	15.0	26.0	34	40	9113	16137
96	7.0	14.0	45	57	6159	11131	46	15.0	26.0	34	40	9115	16140
95	8.0	15.0	45	55	7105	11144	45	15.8	27.0	34	39	9117	16148
94	8.0	15.0	44	55	7109	11158	44	15.0	27.0	34	36	9122	16149
93	8.0	16.0	44	54	7111	12111	43	15.0	27.0	34	39	9126	16152
92	8.5	16.0	44	53	7115	12120	42	15.0	27.0	34	35	9130	17102
91	9.0	16.0	43	52	7118	12131	41	15.0	28.0	33	38	9132	17107
90	9.0	16.5	43	52	7123	12137	40	16.0	28.0	33	38	9135	17112
89	9.0	17.0	43	51	7127	12140	39	16.0	28.0	33	34	9136	17127
88	9.0	17.0	42	51	7131	12143	38	16.0	28.5	33	38	9140	17135
87	9.0	17.0	42	50	7134	12148	37	16.0	29.0	33	37	9143	17137
86	10.0	18.0	42	50	7137	12152	36	16.0	29.0	33	37	9145	17140
85	10.0	18.0	41	50	7138	12151	35	16.0	29.5	32	37	9148	17146
84	10.0	18.0	41	50	7141	13106	34	16.5	30.0	32	36	9153	17152
83	10.0	18.0	41	49	7146	13109	33	17.0	30.0	32	36	9157	18100
82	10.0	19.0	41	49	7148	13114	32	17.0	31.0	32	36	10101	18104
81	10.0	19.0	40	48	7154	13122	31	17.0	31.0	32	36	10104	18110
80	10.0	19.0	40	48	7159	13123	30	17.0	31.0	31	35	10106	18115
79	10.0	19.0	40	47	8100	13129	29	17.0	32.0	31	35	10111	18119
78	11.0	20.0	40	47	8104	13133	28	18.0	32.0	31	35	10113	18124
77	11.0	20.0	40	46	8106	13137	27	18.0	32.5	31	35	10116	18126
76	11.0	20.0	39	46	8109	13147	26	18.0	33.0	30	35	10120	18135
75	11.0	20.0	39	45	8111	13154	25	18.0	33.0	30	34	10123	18140
74	11.0	20.0	39	45	8114	14100	24	18.5	34.0	30	34	10130	18150
73	11.0	21.0	39	45	8117	14103	23	19.0	35.0	30	34	10135	19106
72	11.5	21.0	39	45	8120	14109	22	19.0	35.5	30	33	10138	19105
71	12.0	21.0	39	45	8124	14113	21	19.0	36.0	29	33	10142	19117
70	12.0	21.5	38	44	8126	14119	20	20.0	37.0	29	33	10150	19126
69	12.0	22.0	38	44	8128	14123	19	20.5	37.0	29	32	10154	19132
68	12.0	22.0	38	44	8130	14129	18	20.0	38.0	29	32	11100	19139
67	12.0	22.0	38	43	8130	14133	17	21.0	39.0	28	32	11104	19154
66	12.0	22.0	38	43	8132	14144	16	21.0	39.0	28	31	11117	20101
65	12.0	22.0	37	43	8132	14152	15	21.0	40.0	28	31	11122	20122
64	13.0	23.0	37	43	8135	14159	14	22.0	41.0	27	31	11130	20145
63	13.0	23.0	37	43	8138	15104	13	22.0	41.0	27	30	11141	20151
62	13.0	23.0	37	42	8140	15112	12	23.0	42.0	27	30	11145	21107
61	13.0	23.0	37	42	8142	15120	11	23.0	43.0	26	30	11156	21122
60	13.0	23.0	37	42	8144	15126	10	24.0	43.0	26	29	12103	21136
59	13.0	24.0	36	42	8148	15133	9	24.0	44.5	25	28	12111	21139
58	13.0	24.0	36	41	8147	15141	8	25.0	46.0	25	27	12120	22118
57	13.0	24.0	36	41	8149	15147	7	28.0	47.0	25	27	12127	22126
56	14.0	24.0	36	41	8151	15152	6	26.0	48.0	24	26	13100	22138
55	14.0	24.5	36	41	8153	15154	5	26.0	50.0	23	25	13113	22153
54	14.0	25.0	36	41	8155	16101	4	27.0	51.5	22	23	13148	23100
53	14.0	25.0	35	40	8157	16104	3	28.0	54.5	21	21	14116	24127
52	14.0	25.0	35	40	9100	16111	2	30.0	59.0	19	17	15200	25112
51	14.0	25.0	35	40	9102	16119	1	33.0	65.0	16	10	16135	28183
50	14.0	26.0	35	40	9106	16124							

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS — AGE= 15

% TILE	TRICEP SKINFOLD N= (1088)	SUM OF SKINFOLDS (0677)	SIT & REACH (1104)	SIT-UPS (1107)	1 MILE RUN (0814)	1.6 MILE RUN (0257)	% TILE	TRICEP SKINFOLD N= (1088)	SUM OF SKINFOLDS (0677)	SIT & REACH (1104)	SIT-UPS (1107)	1 MILE RUN (0814)	1.6 MILE RUN (0257)
99	3.0	8.0	60	71	5111	8135	49	9.0	17.0	32	47	6153	11153
98	3.5	8.5	57	67	5124	8152	48	9.0	17.0	32	47	6154	11158
97	4.0	9.0	55	66	5134	9100	47	9.0	17.0	32	46	6156	12100
96	4.0	9.5	53	64	5138	9107	46	9.0	17.5	32	46	6158	12111
95	4.0	10.0	53	63	5140	9113	45	9.0	18.0	31	46	7100	12118
94	4.5	10.0	52	62	5144	9115	44	9.0	18.0	31	46	7101	12118
93	5.0	10.0	50	62	5151	9118	43	9.5	18.0	31	45	7103	12120
92	5.0	10.5	50	61	5155	9122	42	10.0	18.0	31	45	7105	12120
91	5.0	11.0	48	60	5158	9125	41	10.0	19.0	31	45	7107	12127
90	5.0	11.0	48	60	6100	9130	40	10.0	19.0	30	45	7108	12133
89	5.0	11.0	47	60	6102	9138	39	10.0	19.0	30	45	7109	12134
88	5.0	11.0	45	59	6103	9144	38	10.0	19.0	30	45	7110	12144
87	5.0	11.5	45	58	6104	9148	37	10.0	19.0	30	44	7112	12153
86	5.0	12.0	44	57	6105	9151	36	10.0	20.0	30	44	7114	13100
85	5.5	12.0	43	57	6108	9154	35	10.0	20.0	30	44	7115	13103
84	6.0	12.0	43	57	6109	9158	34	11.0	20.0	29	44	7117	13106
83	6.0	12.0	42	56	6111	10105	33	11.0	20.0	29	43	7118	13109
82	6.0	12.5	42	56	6112	10107	32	11.0	20.0	29	43	7120	13112
81	6.0	13.0	41	56	6114	10111	31	11.0	21.0	29	43	7122	13120
80	6.0	13.0	40	55	6115	10116	30	11.0	21.0	28	43	7125	13140
79	6.0	13.0	40	55	6115	10120	29	11.0	21.0	28	42	7126	13142
78	6.0	13.0	40	55	6116	10123	28	12.0	22.0	28	42	7129	13150
77	6.0	13.0	40	55	6118	10126	27	12.0	22.0	28	42	7131	14100
76	6.5	13.0	39	54	6120	10129	26	12.0	23.0	27	42	7135	14108
75	6.5	13.5	39	54	6120	10134	25	12.0	23.0	27	41	7140	14112
74	7.0	13.5	38	54	6121	10140	24	12.0	23.0	27	41	7143	14122
73	7.0	14.0	38	53	6121	10141	23	12.0	24.0	27	41	7144	14135
72	7.0	14.0	38	53	6124	10143	22	13.0	24.0	26	40	7151	14144
71	7.0	14.0	38	53	6124	10145	21	13.0	24.0	26	40	7158	14148
70	7.0	14.0	37	52	6125	10150	20	13.0	25.0	26	40	8100	15100
69	7.0	14.0	37	52	6127	10151	19	13.5	25.0	26	40	8101	15106
68	7.0	14.0	37	52	6128	10153	18	14.0	25.5	25	40	8105	15116
67	7.0	14.5	37	51	6130	10156	17	14.5	26.0	25	39	8111	15129
66	7.0	15.0	36	51	6131	10157	16	14.0	27.0	24	39	8118	15138
65	7.0	15.0	36	51	6132	10159	15	15.0	27.0	24	38	8126	16128
64	7.0	15.0	36	51	6133	11101	14	15.0	28.0	23	38	8132	16146
63	7.0	15.0	35	50	6135	11106	13	15.0	29.0	23	37	8136	16157
62	7.5	15.0	35	50	6136	11107	12	16.0	30.0	23	37	8140	17100
61	8.0	15.0	35	50	6137	11110	11	16.0	31.0	22	36	8157	17127
60	8.0	16.0	35	50	6138	11112	10	17.0	32.0	22	36	9105	18137
59	8.0	16.0	35	50	6139	11116	9	17.0	33.0	21	35	9112	19136
58	8.0	16.0	34	50	6140	11120	8	18.0	35.0	21	34	9128	20100
57	8.0	16.0	34	50	6141	11123	7	18.0	35.5	20	33	9141	20100
56	8.0	16.0	34	49	6142	11128	6	19.0	38.0	20	32	10118	20100
55	8.0	16.0	34	49	6144	11132	5	20.0	41.0	19	31	11108	20100
54	8.0	16.0	34	49	6145	11136	4	21.0	46.0	18	30	11133	20100
53	8.5	16.0	33	48	6146	11143	3	22.0	51.0	17	28	12116	20100
52	9.0	16.5	33	48	6148	11144	2	26.0	63.0	16	26	12138	20100
51	9.0	17.0	33	48	6150	11147	1	29.0	88.0	13	19	13144	20100
50	9.0	17.0	33	47	6150	11151							

GIRLS

AGE= 16

% TILE	TRICEP SKINFOLD N= (1126)	SUM OF SKINFOLDS (0746)	SIT & REACH (1114)	SIT-UPS (1123)	1 MILE RUN (0427)	1.6 MILE RUN (0387)	% TILE	TRICEP SKINFOLD N= (1126)	SUM OF SKINFOLDS (0746)	SIT & REACH (1114)	SIT-UPS (1123)	1 MILE RUN (0427)	1.6 MILE RUN (0387)
99	4.0	13.0	49	63	6122	10121	49	15.0	27.0	36	40	9104	16107
98	6.0	14.0	47	61	6146	10138	48	15.0	27.0	36	40	9107	16117
97	7.0	15.0	47	58	6155	10150	47	16.0	28.0	36	40	9111	16122
96	8.0	15.0	46	57	6159	11104	46	16.0	28.0	35	39	9113	16126
95	8.0	16.0	45	55	7106	11112	45	16.0	28.0	35	35	9115	16136
94	9.0	16.0	45	54	7113	11121	44	16.0	29.0	35	39	9120	16141
93	9.0	17.0	45	53	7118	11129	43	16.0	25.0	35	35	9121	16147
92	9.0	17.0	44	52	7120	11135	42	16.0	29.0	35	38	9126	16206
91	9.0	17.0	44	52	7122	11145	41	16.0	25.0	35	38	9129	17111
90	9.0	18.0	44	51	7125	11157	40	17.0	30.0	34	38	9132	17116
89	10.0	18.0	44	51	7128	12113	39	17.0	30.0	34	34	9136	17115
88	10.0	18.0	43	50	7133	12126	38	17.0	30.0	34	37	9138	17126
87	10.0	19.0	43	50	7136	12129	37	17.0	31.0	34	37	9140	17137
86	10.0	19.0	43	50	7138	12138	36	17.0	31.0	34	37	9143	17142
85	10.0	19.0	43	50	7139	12143	35	17.0	31.5	34	37	9143	17148
84	10.0	19.0	42	49	7146	12147	34	17.0	32.0	33	36	9149	17153
83	10.0	19.5	42	49	7148	12158	33	18.0	32.0	33	36	9158	17157
82	11.0	20.0	42	48	7151	13107	32	18.0	32.5	33	36	10100	18103
81	11.0	20.0	42	48	7155	13118	31	18.0	33.0	33	36	10106	18105
80	11.0	20.0	41	48	7158	13122	30	18.0	33.0	33	35	10113	18115
79	11.0	20.0	41	47	8100	13132	29	18.0	33.0	32	35	10115	18119
78	11.0	21.0	41	47	8103	13138	28	18.0	34.0	32	35	10119	18124
77	11.0	21.0	41	47	8104	13145	27	19.0	34.0	32	35	10120	18126
76	11.0	21.0	41	46	8108	13151	26	19.0	34.0	32	34	10129	18146
75	11.5	21.0	40	46	8110	13155	25	19.0	35.0	32	34	10141	18150
74	12.0	22.0	40	46	8115	14101	24	19.0	35.0	31	34	10149	19102
73	12.0	22.0	40	45	8115	14107	23	20.0	36.0	31	34	10156	19107
72	12.0	22.0	40	45	8116	14110	22	20.0	36.0	31	33	11100	19120
71	12.0	22.0	40	45	8118	14121	21	20.0	36.0	30	33	11104	19131
70	12.0	22.5	40	45	8120	14125	20	20.0	37.0	30	32	11107	19132
69	12.0	23.0	39	45	8124	14132	19	20.0	38.0	30	32	11110	19148
68	12.5	23.0	39	44	8125	14141	18	20.0	38.0	30	32	11117	19158
67	13.0	23.0	39	44	8127	14144	17	21.0	39.0	30	32	11121	20109
66	13.0	23.0	39	44	8129	14145	16	21.0	39.0	30	31	11128	20118
65	13.0	23.5	39	43	8130	14150	15	21.0	40.0	29	31	11131	20126
64	13.0	24.0	39	43	8131	14156	14	22.0	41.0	29	30	11134	20147
63	13.0	24.0	38	43	8133	14158	13	22.0	42.0	28	30	11144	21106
62	13.0	24.0	38	42	8137	15100	12	22.0	43.0	28	30	11152	21117
61	13.5	25.0	38	42	8138	15109	11	23.0	43.0	28	30	12100	21133
60	14.0	25.0	38	42	8140	15112	10	23.5	44.0	27	30	12105	21144
59	14.0	25.0	38	42	8142	15120	9	24.0	45.0	27	29	12113	21154
58	14.0	25.0	37	41	8144	15124	8	25.0	46.0	26	28	12118	22114
57	14.0	25.0	37	41	8145	15127	7	25.5	47.0	26	28	12147	22131
56	14.0	25.5	37	41	8148	15134	6	26.0	49.0	25	27	13115	22139
55	14.0	26.0	37	41	8149	15132	5	27.0	51.5	24	25	13131	22149
54	15.0	26.0	37	40	8150	15135	4	28.0	54.0	23	24	14105	23104
53	15.0	26.0	37	40	8150	15140	3	29.0	56.0	22	22	14149	23136
52	15.0	26.0	36	40	8156	15151	2	30.0	57.0	21	20	14157	24127
51	15.0	27.0	36	40	8158	15156	1	33.0	62.5	17	14	17100	26136
50	15.0	27.0	36	40	9100	16104							

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS

AGE=16

% TILE	TRICEP SKINFOLD N= (1316)	SUM OF SKINFOLDS (C967)	SIT & REACH (1304)	SIT-UPS (1312)	1 MILE RUN (0920)	1.5 MILE RUN (0361)	% TILE	TRICEP SKINFOLD N= (1316)	SUM OF SKINFOLDS (C967)	SIT & REACH (1304)	SIT-UPS (1312)	1 MILE RUN (0920)	1.5 MILE RUN (0361)
99	3.0	8.0	58	70	0108	0129	49	9.0	17.0	34	47	0704	11361
98	3.5	9.0	58	67	0110	0141	48	9.0	17.0	34	46	0708	11408
97	3.5	9.0	55	65	0120	0107	47	9.0	17.0	34	46	0705	11465
96	4.0	9.5	55	63	0133	0100	46	9.0	17.5	33	46	7100	11518
95	4.0	10.0	53	63	0139	9105	45	9.0	18.0	33	46	7102	11561
94	4.0	10.0	52	62	0143	9107	44	9.0	18.0	33	45	7104	11526
93	4.0	10.5	50	61	0145	9109	43	9.0	18.0	32	45	7105	11531
92	4.5	10.5	50	60	0149	9110	42	9.0	18.0	32	45	7106	11537
91	5.0	11.0	49	60	0152	9113	41	9.5	18.5	32	45	7107	11541
90	5.0	11.0	48	59	0155	9115	40	10.0	19.0	32	45	7110	11544
89	5.0	11.0	47	58	0159	9119	39	10.0	19.0	32	45	7111	11546
88	5.0	11.5	46	58	0100	9124	38	10.0	19.0	32	44	7113	11549
87	5.0	11.5	45	57	0102	9128	37	10.0	19.5	31	44	7115	11553
86	5.0	12.0	45	57	0104	9132	36	10.0	20.0	31	44	7117	11556
85	5.0	12.0	45	56	0105	9134	35	10.0	20.0	31	43	7120	12000
84	5.0	12.0	44	56	0107	9137	34	10.0	20.0	31	43	7122	12001
83	5.5	12.0	43	55	0109	9140	33	10.0	20.0	30	43	7125	12003
82	6.0	12.5	43	55	0110	9142	32	10.5	20.5	30	42	7128	12012
81	6.0	13.0	42	55	0112	9142	31	11.0	21.0	30	42	7130	12021
80	6.0	13.0	42	54	0114	9146	30	11.0	21.0	30	42	7133	12027
79	6.0	13.0	41	54	0116	9150	29	11.0	21.0	30	42	7139	12030
78	6.0	13.0	41	54	0116	9156	28	11.0	21.0	29	42	7140	12036
77	6.0	13.0	41	53	0117	10100	27	11.0	22.0	29	41	7141	12041
76	6.0	13.5	40	53	0118	10102	26	11.0	22.0	29	41	7146	12051
75	6.0	13.5	40	53	0120	10104	25	12.0	22.5	29	41	7150	12055
74	6.0	14.0	40	53	0122	10105	24	12.0	23.0	28	40	7153	12059
73	6.5	14.0	39	52	0123	10107	23	12.0	23.0	28	40	7158	12110
72	7.0	14.0	39	52	0124	10109	22	12.0	23.5	28	40	8101	12115
71	7.0	14.0	39	52	0125	10111	21	12.5	24.0	27	40	8103	12120
70	7.0	14.0	38	52	0126	10116	20	13.0	24.0	27	40	8104	12126
69	7.0	14.0	38	51	0128	10119	19	13.0	24.0	27	40	8110	12130
68	7.0	14.5	38	51	0129	10123	18	13.0	25.0	26	40	8113	14105
67	7.0	15.0	38	51	0130	10126	17	14.0	25.0	26	39	8116	14120
66	7.0	15.0	37	51	0131	10127	16	14.0	25.5	26	38	8121	14126
65	7.0	15.0	37	50	0133	10130	15	14.0	26.0	25	38	8129	14134
64	7.0	15.0	37	50	0135	10132	14	14.5	27.0	25	38	8136	14140
63	7.0	15.0	37	50	0136	10136	13	15.0	27.0	24	37	8140	14145
62	7.0	15.0	37	50	0136	10139	12	15.0	28.0	24	37	8141	14147
61	7.5	15.5	36	50	0138	10140	11	15.5	28.5	24	36	8141	14150
60	7.5	15.5	36	50	0140	10143	10	16.0	29.0	23	35	9107	15142
59	8.0	16.0	36	49	0141	10143	9	16.0	30.0	22	35	9120	16163
58	8.0	16.0	36	49	0142	10147	8	17.0	31.0	22	35	9130	17121
57	8.0	16.0	36	49	0144	10148	7	18.0	33.0	21	34	10102	18148
56	8.0	16.0	35	48	0145	10150	6	18.5	34.0	21	33	10123	19117
55	8.0	16.0	35	48	0146	10152	5	19.0	36.0	20	33	10134	20100
54	8.0	16.0	35	48	0148	10154	4	20.0	38.0	19	30	11104	20000
53	8.0	16.0	35	48	0149	10155	3	21.5	42.0	18	28	11121	20100
52	8.0	16.5	35	47	0151	10157	2	23.0	46.0	16	25	12108	20100
51	8.0	17.0	34	47	0152	10158	1	27.0	56.0	14	19	13100	20100

GIRLS

AGE= 16

% TILE	TRICEP SKINFOLD N= (1369)	SUM OF SKINFOLDS (1015)	SIT & REACH (1365)	SIT-UPS (1364)	1 MILE RUN (0447)	1.5 MILE RUN (0478)	% TILE	TRICEP SKINFOLD N= (1369)	SUM OF SKINFOLDS (1015)	SIT & REACH (1365)	SIT-UPS (1364)	1 MILE RUN (0447)	1.5 MILE RUN (0478)
99	6.0	12.0	49	64	6110	10126	99	16.0	26.0	36	39	9148	16158
98	6.0	15.0	48	61	6129	10143	98	16.0	30.0	36	39	9152	16213
97	7.0	16.0	47	58	6158	10157	97	16.0	30.0	36	39	9152	16125
96	8.0	17.0	47	57	7109	11107	96	17.0	30.0	36	38	9206	16122
95	9.0	17.0	46	56	7114	11122	95	17.0	31.0	36	38	10100	16126
94	9.0	18.0	46	55	7120	11136	94	17.0	31.0	36	38	10101	16134
93	9.0	19.0	45	54	7125	11133	93	17.0	31.0	36	38	10103	16144
92	10.0	19.0	45	54	7130	11146	92	17.0	32.0	35	37	10105	16146
91	10.0	19.0	45	53	7137	11151	91	17.5	32.0	35	37	10107	16152
90	10.0	19.5	45	52	7142	12104	90	18.0	33.0	35	37	10110	16156
89	10.0	20.0	44	52	7145	12115	89	18.0	33.0	35	37	10113	17103
88	10.0	20.0	44	51	7148	12120	88	18.0	33.0	35	37	10116	17108
87	11.0	20.0	43	50	7150	12135	87	18.0	33.0	34	36	10121	17112
86	11.0	21.0	43	50	7155	12140	86	18.0	34.0	34	36	10124	17116
85	11.0	21.0	43	50	7157	12146	85	19.0	34.0	34	36	10128	17118
84	11.0	21.0	43	50	8101	12148	84	19.0	34.0	34	35	10131	17121
83	11.0	21.0	43	49	8102	12154	83	19.0	35.0	34	35	10136	17125
82	11.0	21.5	42	49	8106	12157	82	19.0	35.0	34	35	10137	17127
81	12.0	22.0	42	48	8106	13105	81	19.0	35.0	33	35	10140	17133
80	12.0	22.0	42	48	8111	13108	80	19.0	35.0	33	35	10147	17142
79	12.0	23.0	42	47	8115	13112	79	20.0	36.0	33	34	10151	17147
78	12.0	23.0	41	47	8116	13120	78	20.0	36.0	33	34	10155	18103
77	12.0	23.0	41	46	8119	13127	77	20.0	37.0	33	34	10157	18110
76	13.0	23.0	41	46	8122	13134	76	20.0	37.0	32	33	10159	18114
75	13.0	24.0	41	45	8125	13142	75	20.0	37.0	32	33	10159	18123
74	13.0	24.0	40	45	8128	13144	74	21.0	38.0	32	33	11112	18128
73	13.0	24.0	40	45	8130	13149	73	21.0	38.0	32	33	11130	18144
72	13.0	24.0	40	45	8133	13154	72	21.0	39.0	32	32	11136	18156
71	13.0	25.0	40	44	8136	14100	71	21.0	40.0	31	32	11147	19106
70	13.0	25.0	40	44	8140	14106	70	22.0	40.0	31	32	11151	19113
69	14.0	25.0	40	43	8143	14112	69	22.0	41.0	31	31	12100	19131
68	14.0	25.0	40	43	8146	14119	68	22.0	41.0	30	31	12105	19148
67	14.0	26.0	39	42	8150	14125	67	23.0	42.0	30	30	12115	20106
66	14.0	26.0	39	42	8150	14129	66	23.0	42.0	30	30	12122	20113
65	14.0	26.0	39	42	8153	14137	65	23.0	42.0	30	30	12138	20128
64	14.0	26.0	39	42	8157	14146	64	23.0	43.0	29	30	12147	20136
63	14.0	26.0	39	42	9100	14149	63	24.0	44.0	29	30	12148	20150
62	15.0	27.0	38	41	9103	14157	62	24.0	45.0	29	29	12153	21110
61	15.0	27.0	38	41	9106	15100	61	24.0	45.0	28	29	13101	21117
60	15.0	27.0	38	41	9110	15109	60	25.0	46.0	28	28	13117	21119
59	15.0	27.0	38	41	9113	15113	9	25.0	47.0	27	28	13146	21129
58	15.0	27.0	38	40	9115	15118	8	26.0	48.0	27	27	14100	21140
57	15.0	28.0	38	40	9119	15124	7	26.0	50.0	26	26	14128	21153
56	15.0	28.0	37	40	9120	15129	6	27.0	52.0	25	25	14136	22105
55	15.0	28.0	37	40	9121	15131	5	28.0	53.0	25	25	15115	22132
54	15.0	28.0	37	40	9126	15134	4	28.0	55.0	24	24	15123	23107
53	16.0	28.0	37	40	9130	15138	3	29.0	57.0	22	23	16121	24100
52	16.0	28.0	37	40	9134	15140	2	31.0	60.0	21	20	18100	26148
51	16.0	29.0	37	40	9138	15152	1	34.0	66.0	19	15	19120	27167
50	16.0	29.0	37	40	9142	16100							

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS — AGE=17

%TILE	TRICEP SKINFOLD N= (10853)	SUM OF SKINFOLDS (8667)	SIT & REACH (10018)	SIT-UPS (10851)	1 MILE RUN (08534)	1.6 MILE RUN (03668)	%TILE	TRICEP SKINFOLD N= (1082)	SUM OF SKINFOLDS (8667)	SIT & REACH (10018)	SIT-UPS (10851)	1 MILE RUN (08534)	1.6 MILE RUN (03668)
99	3.0	8.0	60	72	0513	0101	49	8.0	17.0	35	46	0648	11123
98	3.0	9.0	59	67	0517	0112	48	8.0	17.0	34	46	0650	11126
97	3.5	9.0	58	65	0525	0127	47	8.0	17.5	34	46	0652	11129
96	4.0	9.5	58	65	0528	0136	46	8.0	17.5	34	46	0653	11130
95	4.0	10.0	55	63	0533	0144	45	8.0	18.0	34	45	0656	11134
94	4.0	10.0	55	62	0536	0149	44	8.0	18.0	34	45	0659	11142
93	4.0	11.0	55	61	0538	0154	43	8.0	18.0	33	45	7100	11144
92	4.0	11.0	53	61	0541	0159	42	9.0	18.0	33	45	7100	11143
91	4.0	11.0	53	60	0542	0103	41	9.0	18.0	33	45	7102	11149
90	5.0	11.0	51	60	0544	0105	40	9.0	18.5	33	44	7104	12101
89	5.0	12.0	50	60	0547	0110	39	9.0	19.0	33	44	7104	12103
88	5.0	12.0	50	59	0548	0120	38	9.0	19.0	32	44	7106	12108
87	5.0	12.0	49	58	0550	0120	37	9.0	19.0	32	44	7109	12108
86	5.0	12.0	48	58	0552	0123	36	9.0	19.0	32	43	7110	12113
85	5.0	12.0	48	57	0553	0126	35	10.0	19.5	32	43	7112	12120
84	5.0	12.0	47	57	0555	0127	34	10.0	20.0	32	43	7113	12126
83	5.0	12.5	46	56	0558	0131	33	10.0	20.0	31	43	7115	12133
82	5.0	13.0	45	56	0600	0134	32	10.0	20.0	31	43	7117	12143
81	5.0	13.0	45	55	0602	0140	31	10.0	21.0	31	43	7118	12147
80	5.5	13.0	45	55	0604	0142	30	10.0	21.0	30	42	7124	12150
79	6.0	13.0	44	55	0606	0147	29	10.0	21.0	30	42	7125	12158
78	6.0	13.0	43	54	0608	0148	28	10.5	21.5	30	41	7127	13106
77	6.0	13.0	43	54	0609	0149	27	11.0	22.0	30	41	7130	13111
76	6.0	13.5	42	53	0611	0153	26	11.0	22.0	29	41	7130	13115
75	6.0	13.5	42	53	0613	10100	25	11.0	22.0	29	41	7134	13121
74	6.0	14.0	42	53	0615	10105	24	11.0	22.0	29	40	7137	13134
73	6.0	14.0	41	53	0617	10109	23	11.0	23.0	28	40	7140	13140
72	6.0	14.0	41	52	0618	10111	22	11.5	23.0	28	40	7146	13148
71	6.0	14.0	41	52	0619	10112	21	12.0	23.5	28	40	7151	14104
70	6.0	14.0	40	52	0620	10115	20	12.0	24.0	28	40	7154	14110
69	6.0	14.0	40	51	0620	10120	19	12.0	24.0	27	40	8101	14123
68	6.5	14.5	40	51	0621	10122	18	12.5	25.0	27	39	8106	14137
67	6.5	14.5	39	51	0624	10130	17	13.0	25.0	27	39	8109	14144
66	7.0	15.0	39	50	0625	10132	16	13.0	25.0	27	38	8115	14156
65	7.0	15.0	39	50	0626	10135	15	14.0	26.0	27	38	8120	15128
64	7.0	15.0	38	50	0627	10137	14	14.0	26.5	26	38	8139	15155
63	7.0	15.0	38	50	0629	10139	13	15.0	27.0	26	37	8143	16100
62	7.0	15.0	38	50	0630	10144	12	15.0	28.0	25	37	8154	16104
61	7.0	15.5	38	50	0630	10148	11	15.0	29.0	25	36	9101	17102
60	7.0	16.0	37	50	0631	10151	10	16.0	30.0	24	35	9108	17130
59	7.0	16.0	37	50	0632	10154	9	16.5	31.5	24	35	9120	18122
58	7.0	16.0	37	49	0634	10157	8	17.0	33.0	23	34	9138	19104
57	7.0	16.0	37	49	0635	10159	7	17.0	33.0	23	34	10100	20100
56	7.0	16.0	36	48	0636	11102	6	18.0	34.0	22	33	10120	20100
55	7.0	16.0	36	48	0638	11108	5	19.0	36.5	21	32	10148	20140
54	7.5	16.0	36	48	0640	11111	4	20.0	37.5	20	30	11101	20160
53	7.5	16.5	36	47	0641	11113	3	21.0	41.0	19	28	12141	20160
52	8.0	16.5	36	47	0642	11116	2	23.0	46.5	16	25	14134	20160
51	8.0	17.0	35	47	0643	11118	1	28.0	61.0	13	20	16148	20167
50	8.0	17.0	35	47	0644	11120							

GIRLS

AGE=17

% TILE	TRICEP SKINFOLD N= (0963)	SUM OF SKINFOLDS (0658)	SIT & REACH (0967)	SIT-UPS (0974)	1 MILE RUN (0398)	1.5 MILE RUN (0406)	% TILE	TRICEP SKINFOLD N= (963)	SUM OF SKINFOLDS (0658)	SIT & REACH (0967)	SIT-UPS (0974)	1 MILE RUN (0398)	1.5 MILE RUN (0406)
99	6.0	12.0	49	68	6112	[illegible]	9	16.0	35.0	37	48	10110	15110
98	6.0	14.0	48	60	6143	[illegible]	8	16.0	29.0	36	40	10115	15115
97	6.0	15.0	47	59	[illegible]	[illegible]	47	16.0	36.0	36	39	10118	15121
96	7.0	15.0	46	58	7111	[illegible]	46	16.0	30.0	36	36	10122	15127
95	7.0	16.0	46	57	7119	10127	45	16.0	31.0	36	36	10125	15129
94	8.0	16.0	46	56	7123	11122	44	16.0	31.0	36	36	10128	15134
93	8.0	17.0	45	55	7130	11130	43	17.0	31.0	36	35	10131	15142
92	9.0	17.0	45	54	7134	11138	42	17.0	31.0	35	35	10132	15153
91	9.0	18.0	45	53	7139	11153	41	17.0	31.0	35	35	10134	15156
90	9.0	18.0	44	53	7143	11158	40	17.0	32.0	35	35	10137	15162
89	9.0	18.0	44	52	7146	12103	39	17.5	32.0	35	37	10139	15166
88	10.0	19.0	44	52	7150	12109	38	18.0	32.0	35	37	10140	15114
87	10.0	19.5	44	51	7152	12120	37	18.0	32.5	35	37	10148	15116
86	10.0	20.0	43	50	7157	12124	36	18.0	33.0	35	37	10153	15123
85	10.0	20.0	43	50	7159	12129	35	18.0	34.0	34	36	10159	15135
84	10.0	21.0	43	50	8108	12136	34	19.0	34.0	34	32	11116	15144
83	10.0	21.0	43	50	8108	12141	33	19.0	34.0	34	36	11118	15146
82	11.0	21.0	42	49	8111	12148	32	19.0	35.0	34	36	11116	15155
81	11.0	21.0	42	49	8114	12155	31	19.0	35.0	34	35	11121	17100
80	11.0	22.0	42	48	8118	13100	30	19.0	36.0	34	35	11124	17102
79	11.0	22.0	42	48	8121	13110	29	20.0	36.0	33	35	11126	17109
78	12.0	22.0	41	47	8124	13117	28	20.0	37.0	33	35	11133	17116
77	12.0	22.5	41	47	8125	13118	27	20.0	37.0	33	34	11138	17124
76	12.0	23.0	41	47	8126	13123	26	20.0	38.0	33	34	11142	17135
75	12.0	23.0	41	46	8134	13128	25	20.0	38.0	33	34	11147	17146
74	12.0	23.0	41	46	8141	13130	24	21.0	38.0	32	34	11150	17158
73	12.0	23.0	41	46	8145	13134	23	21.0	39.0	32	33	11154	18100
72	12.0	24.0	40	45	8148	13137	22	21.0	39.0	32	33	11158	18112
71	12.0	24.0	40	45	8155	13141	21	21.0	40.0	32	33	12104	18117
70	13.0	24.0	40	45	8158	13145	20	22.0	41.0	31	32	12117	18140
69	13.0	24.0	40	45	9103	13150	19	22.0	42.0	31	32	12123	18148
68	13.0	25.0	40	45	9108	13156	18	22.0	42.0	31	32	12130	18152
67	13.0	25.0	40	44	9108	13158	17	23.0	43.0	31	31	12148	18158
66	13.0	25.0	40	44	9110	13159	16	23.0	43.0	30	31	13105	19120
65	14.0	25.0	39	44	9112	14102	15	24.0	44.0	30	30	13128	19137
64	14.0	25.0	39	43	9115	14104	14	24.0	45.0	30	30	13140	19148
63	14.0	25.0	39	43	9119	14106	13	24.0	46.0	29	30	14108	19152
62	14.0	25.0	39	43	9126	14109	12	25.0	47.0	29	30	14116	20107
61	14.0	25.5	39	42	9129	14118	11	25.0	48.0	28	29	14123	20119
60	14.0	26.0	38	42	9131	14118	10	25.0	50.0	28	28	15103	20123
59	14.0	26.0	38	42	9135	14123	9	25.0	51.0	28	28	15123	20142
58	14.0	26.0	38	41	9140	14125	8	26.0	52.0	27	27	15141	20158
57	15.0	27.0	38	41	9141	14126	7	27.0	53.0	26	26	15152	21123
56	15.0	27.0	38	41	9143	14128	6	27.0	55.0	25	26	16100	21130
55	15.0	27.0	38	40	9147	14138	5	29.0	58.0	24	25	16148	21150
54	15.0	28.0	38	40	9151	14142	4	30.0	60.0	23	25	17128	22130
53	15.0	28.0	37	40	9156	14152	3	32.0	61.0	22	23	18100	22155
52	15.0	28.0	37	40	10100	14158	2	33.0	64.0	21	20	18154	23111
51	15.0	29.0	37	40	10105	14159	1	36.6	67.0	19	18	21100	24130
50	15.0	29.0	37	40	10107	15102							

HEALTH RELATED PHYSICAL FITNESS TEST
NORMS FOR THE
STATE OF ILLINOIS

BOYS

% TILE	TRICEP SKINFOLD N= (0392)	SUM OF SKINFOLDS (0183)	SIT & REACH (0392)	SIT-UPS (0390)	1 MILE RUN (0281)	1.6 MILE RUN (0092)
99	3.0	9.0	55	72	6:10	8:24
98	3.5	9.0	51	67	6:15	8:34
97	4.0	9.5	50	66	6:21	8:39
96	4.0	10.0	48	65	6:24	8:46
95	4.0	10.0	46	64	6:31	8:56
94	4.0	10.5	45	63	6:34	9:00
93	4.0	10.5	45	62	6:36	9:01
92	4.0	11.0	45	62	6:40	9:05
91	4.0	11.0	44	61	6:42	9:10
90	5.0	11.0	44	61	6:44	9:18
89	5.0	11.5	44	60	6:47	9:23
88	5.0	11.5	44	59	6:50	9:40
87	5.0	12.0	43	59	6:52	9:44
86	5.0	12.0	43	58	6:54	9:58
85	5.0	12.0	43	58	6:54	9:59
84	5.0	12.0	43	57	6:55	10:00
83	5.0	13.0	42	57	6:57	10:02
82	5.0	13.0	42	56	6:58	10:03
81	5.0	13.0	42	56	6:59	10:08
80	5.5	13.5	41	56	6:00	10:18
79	6.0	13.5	41	55	6:01	10:24
78	6.0	14.0	41	55	6:03	10:30
77	6.0	14.0	40	55	6:04	10:40
76	6.0	14.0	40	54	6:05	10:45
75	6.0	14.0	40	54	6:06	10:47
74	6.0	14.0	39	54	6:06	10:54
73	6.0	14.0	39	53	6:09	10:57
72	6.0	14.5	39	53	6:09	10:59
71	6.0	15.0	39	53	6:10	11:00
70	6.0	15.0	39	53	6:10	11:02
69	6.5	15.0	39	52	6:11	11:06
68	7.0	15.0	38	52	6:11	11:09
67	7.0	15.0	38	51	6:12	11:11
66	7.0	15.0	38	51	6:15	11:14
65	7.0	15.0	38	51	6:15	11:18
64	7.0	15.5	37	51	6:16	11:19
63	7.0	15.5	37	50	6:17	11:20
62	7.0	16.0	37	50	6:18	11:24
61	7.0	16.0	37	50	6:19	11:31
60	7.0	16.0	37	50	6:20	11:32
59	7.0	16.0	36	50	6:22	11:34
58	7.0	16.0	36	50	6:24	11:34
57	7.5	16.0	36	49	6:25	11:34
56	7.5	16.5	36	49	6:25	11:35
55	8.0	16.5	36	49	6:26	11:38
54	8.0	16.5	36	48	6:29	11:40
53	8.0	17.0	36	48	6:30	11:40
52	8.0	17.0	35	48	6:31	11:41
51	8.0	17.0	35	48	6:35	11:49
50	8.0	17.0	35	47	6:36	11:56

AGE=16

% TILE	TRICEP SKINFOLD N= (392)	SUM OF SKINFOLDS (0183)	SIT & REACH (0392)	SIT-UPS (0390)	1 MILE RUN (0281)	1.6 MILE RUN (0092)
49	8.0	17.0	35	47	6:37	12:00
48	8.0	17.0	34	47	6:39	12:00
47	8.0	17.5	34	46	6:39	12:00
46	8.5	18.0	34	46	6:39	12:01
45	8.5	18.0	34	46	6:41	12:04
44	9.0	18.0	34	45	6:42	12:11
43	9.0	18.0	34	45	6:43	12:12
42	9.0	18.0	34	45	6:45	12:12
41	9.0	18.0	33	45	6:47	12:15
40	9.0	18.5	33	45	6:48	12:28
39	9.0	19.0	33	45	6:50	12:34
38	9.0	19.0	33	45	6:52	12:39
37	9.5	19.0	32	45	6:52	12:44
36	10.0	19.0	32	44	6:56	12:47
35	10.0	19.5	32	44	6:59	12:52
34	10.0	20.0	32	44	7:03	12:56
33	10.0	20.0	32	43	7:04	13:00
32	10.0	20.0	31	43	7:07	13:02
31	10.0	21.0	31	42	7:11	13:06
30	10.0	21.0	31	41	7:11	13:12
29	10.0	21.0	30	41	7:12	13:12
28	10.5	21.0	30	41	7:15	13:21
27	11.0	21.0	30	41	7:17	13:21
26	11.0	22.0	29	40	7:19	13:22
25	11.0	22.0	29	40	7:23	13:33
24	11.0	22.0	29	40	7:26	13:38
23	11.0	23.0	29	40	7:28	13:42
22	12.0	23.5	29	39	7:33	13:53
21	12.0	24.0	28	39	7:36	14:06
20	12.0	24.5	28	38	7:43	14:11
19	12.0	25.0	28	38	7:47	14:13
18	12.5	25.5	27	37	7:50	14:16
17	13.0	26.0	27	37	7:54	14:23
16	13.0	27.0	27	36	7:56	14:54
15	13.0	27.0	26	36	7:59	15:05
14	14.0	28.0	26	36	8:07	15:46
13	14.0	28.0	25	35	8:13	16:17
12	15.0	29.0	24	35	8:30	16:24
11	15.0	29.0	24	35	8:41	16:54
10	16.0	31.0	23	34	8:52	19:27
9	17.5	32.0	22	34	8:54	19:51
8	18.0	34.0	22	33	9:08	20:00
7	18.0	36.0	21	33	9:17	20:23
6	19.5	38.0	20	31	9:32	20:55
5	20.0	41.0	20	30	9:52	21:20
4	21.0	43.5	18	29	10:04	22:42
3	22.0	50.0	17	27	11:36	25:07
2	25.0	60.5	14	25	12:14	26:07
1	26.0	68.5	12	23	18:07	28:07

GIRLS

AGE= 16

% TILE	TRICEP SKINFOLD N= (0281)	SUM OF SKINFOLDS (0180)	SIT & REACH (0283)	SIT-UPS (0279)	1 MILE RUN (0187)	1.6 MILE RUN (0687)	% TILE	TRICEP SKINFOLD N= (281)	SUM OF SKINFOLDS (0180)	SIT & REACH (0283)	SIT-UPS (0279)	1 MILE RUN (0187)	1.6 MILE RUN (0687)
99	3.5	11.0	50	60	6:11	11:36	49	12.0	26.0	36	48	9:59	16:34
98	4.0	12.0	48	58	6:40	11:39	48	12.0	26.5	36	45	10:00	16:36
97	4.5	13.5	46	58	6:55	11:49	47	13.0	27.0	36	39	10:03	16:40
96	5.0	15.0	46	56	7:10	12:01	46	13.0	27.0	36	38	10:06	16:48
95	6.0	16.0	45	54	7:20	12:16	45	13.0	27.0	35	38	10:10	16:59
94	7.0	16.0	45	54	7:28	12:24	44	13.0	27.0	35	38	10:12	17:01
93	8.0	17.0	45	52	7:41	12:29	43	13.5	28.0	35	37	10:15	17:02
92	8.0	17.0	44	52	7:43	12:31	42	14.0	28.5	35	37	10:18	17:06
91	8.0	17.0	44	51	7:45	12:36	41	14.0	29.0	35	37	10:20	17:12
90	9.0	17.0	44	50	7:51	12:46	40	14.0	29.0	35	36	10:24	17:12
89	9.0	17.0	44	50	7:57	12:52	39	14.0	29.5	35	36	10:25	17:15
88	9.0	18.0	43	50	7:59	12:54	38	14.0	30.0	35	34	10:27	17:19
87	10.0	18.0	43	50	8:00	12:55	37	14.5	30.0	34	34	10:28	17:22
86	10.0	18.0	43	50	8:01	13:01	36	17.0	30.0	34	35	10:30	17:24
85	10.0	18.5	43	49	8:03	13:30	35	17.0	30.0	34	35	10:30	17:28
84	10.0	19.0	43	48	8:05	13:49	34	17.0	30.0	34	34	10:47	17:27
83	10.0	19.0	42	48	8:09	13:58	33	17.5	30.5	34	34	10:50	17:30
82	10.0	19.0	42	48	8:11	14:05	32	18.0	31.0	33	34	10:56	17:38
81	10.0	20.0	42	48	8:11	14:13	31	18.0	31.0	33	33	10:58	17:40
80	11.0	20.0	42	47	8:13	14:15	30	18.0	31.0	33	33	11:00	17:47
79	11.0	20.0	41	47	8:17	14:16	29	18.0	31.0	33	32	11:02	17:59
78	11.0	20.0	41	46	8:22	14:22	28	18.5	32.0	33	32	11:07	18:22
77	11.0	21.0	41	46	8:26	14:24	27	19.0	32.0	33	32	11:13	18:42
76	11.0	21.0	41	46	8:27	14:25	7.	15.0	33.0	32	32	11:14	18:58
75	11.0	21.0	41	46	8:30	14:27	25	15.0	33.5	32	31	11:22	19:31
74	12.0	21.0	40	46	8:32	14:29	24	19.0	34.0	31	31	11:29	20:03
73	12.0	21.0	40	45	8:36	14:33	23	16.5	35.0	31	30	11:39	20:20
72	12.0	21.5	40	45	8:40	14:35	22	20.0	35.0	31	30	11:44	20:34
71	12.0	22.0	40	45	8:44	14:35	21	20.0	35.0	30	30	11:50	20:43
70	12.0	22.0	39	45	8:47	14:37	20	20.0	35.5	30	30	11:54	20:56
69	12.0	22.0	39	44	8:56	14:40	19	20.0	36.5	30	30	12:01	21:11
68	12.0	22.0	39	44	9:00	14:41	18	21.0	38.0	29	30	12:07	21:18
67	12.0	22.5	39	44	9:05	14:44	17	21.0	38.5	29	29	12:26	21:26
66	13.0	23.0	38	43	9:16	14:54	16	21.0	41.0	28	29	12:38	21:52
65	13.0	23.0	38	43	9:19	15:05	15	22.0	42.0	28	28	12:49	22:06
64	13.0	23.0	38	43	9:21	15:16	14	22.5	42.5	28	28	13:00	22:17
63	13.0	23.0	38	43	9:24	15:21	13	22.0	43.0	27	27	13:22	22:28
62	13.0	23.0	38	43	9:27	15:24	12	23.0	44.0	27	26	14:07	22:38
61	13.0	23.5	38	42	9:28	15:31	11	23.0	45.5	26	26	14:37	23:08
60	13.0	24.0	38	42	9:30	15:38	10	24.0	46.0	26	25	14:57	23:26
59	13.0	24.0	38	42	9:31	15:45	9	24.0	47.0	25	25	15:15	23:20
58	13.0	24.0	37	42	9:34	15:49	8	25.0	47.5	24	25	15:15	23:55
57	14.0	24.0	37	42	9:35	15:52	7	25.0	45.5	24	24	15:27	24:19
56	14.0	24.0	37	41	9:38	15:56	6	26.0	51.5	24	23	15:53	25:10
55	14.0	25.0	37	41	9:41	16:05	5	28.0	54.0	23	22	16:48	25:58
54	14.0	25.0	37	41	9:46	16:16	4	28.5	57.0	22	21	17:22	26:15
53	14.0	25.0	37	40	9:49	16:25	3	30.0	59.5	22	19	18:11	27:16
52	14.0	25.0	36	40	9:52	16:26	2	31.0	62.0	21	17	19:45	29:10
51	15.0	24.0	36	40	9:54	16:29	1	35.0	76.5	18	13	21:07	29:42
50	15.0	24.0	36	40	9:56	16:22							

Northern Illinois University is an equal opportunity institution and does not discriminate on the basis of race, color, religion, sex, age, national origin, or handicap.

1/83 5M 439 7025